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CONSOLIDATION.

It is proposed to merge the Baltimore and Delta Railroad into the Maryland Central Railroad Company under a charter of 1867, which authorizes the city indorsement for six hundred thousand dollars.

The stockholders of the Cato and Beech Creek Railway Company and of the Williamsport and Clarfield Railroad Company, met in Philadelphia on the 28th ult., at the office of the first named company, and effected a consolidation of the two corporations.

The articles of agreement of the consolidation of the Cleveland, Youngstown and Pittsburgh, the Alliance and Lake Erie, and the Steubenville, Canton and Cleveland Railroad companies were filed on the 25th ult., in the office of the Secretary of State of Ohio. The new name is to be "The Cleveland, Youngstown and Pittsburgh Railroad Company." Of the nine directors, five shall be residents of Ohio, and the rest of New York. The capital stock is to be \$1,000,000, in ten thousand shares, one share in either of the three roads consolidated to be worth one share in the consolidation. The consolidation was made by the vote of 1,742 shares, all of which were represented at the meeting in which the election was held.

INCORPORATION.

The Newburgh Horse Railroad Company of Newburgh, N. Y., has been incorporated with a capital of \$250,000.

The Shellabarger Compartment Stock Car Company, of New York, has been incorporated with a capital of \$300,000.

The Great Southern Lumber and Railway Supply Company of New York filed articles of incorporation at Albany the 29th ult.; capital, \$500,000.

The Dayton and Michigan Railroad Elevator Company of Toledo, with a capital of \$125,000, has filed a certificate of incorporation with the Secretary of State of Ohio.

The Hornellsville and Conhocton Valley Railway Company, of Hornellsville, capital, \$180,000, has filed articles of incorporation with the Secretary of State at Albany.

The Rational Horse Shoeing Company of Boston has taken a charter, that with a capital of \$10,000 it may engage in the business of horse shoeing and manufacturing and selling horse-

shoes and horse-nails. John E. Russell is its president and treasurer.

A COMPANY has been incorporated in Newark, N. J., under the title of the Rowan Gold Mining and Milling Company. The object of the organization is to develop the Rowan mine, near Salisbury, North Carolina. The capital of the company is \$250,000. It is claimed that the ore taken from the mine shows an average yield of seventy-four dollars per ton.

A CERTIFICATE of incorporation of the Ohio River and Indiana Railway Company has been filed with the Secretary of State at Columbus, Ohio. Capital stock, \$5,000,000. The incorporators are C. A. Layton, M. D. Shaw, J. W. Leiter, J. C. Hassenier, James Wilson, Jr., J. W. Timmermeister and W. S. Rogers—all of Wapakoneta. The proposed road is to be an air-line through the State, from a point on the Ohio River in Jefferson County to the State line in Mercer County.

ARTICLES of incorporation of the Loma Prieta Railroad Company were filed on the 8th ult. in the office of the clerk of Santa Cruz county, Cal. The purpose of the company is the operation of a single track steam railroad in Santa Cruz county, the route of which is: Commencing at Aptos, to the point of the confluence of Aptos and Bridge creeks, to the point of the confluence of Aptos Creek with a creek running from White's Lagoon, the whole length of the road being five miles. The capital stock of \$50,000, divided into 500 shares. The directors are George Crocker, A. C. Bassett, N. T. Smith, J. L. Willcutt and A. Sanborn.

A NEW company styling itself the "Dominion Bridge Company, Limited," has just made application to the Dominion Government for letters patent of incorporation. The object of the company is stated to be the "manufacturing, constructing, erecting, dealing in and selling wood, iron and steel bridges, and the carrying on of bridge building in all its branches." Also the manufacturing of and dealing in the products and workings of iron and steel, in all its branches. The company is composed of Job Abbott and Phelps Johnson, both of Toronto; Angus Thom, of Montreal; Henry Macfarlane, of Stratford, Ont., and Luke Lyman, of Northampton, Mass. The capital stock is to be \$500,000. The head office will be in Montreal, and branch offices in Toronto and other places in the Dominion. The workshops or manufactory will be in Montreal, or at least in the suburbs. The company have not as yet decided

upon a site for them, but some place between the city and Lachine, in close proximity to the Grand Trunk and Canadian Pacific Railways, will doubtless be selected. The extent of ground required is very large, branch tracks being wanted to all the different railways. It is hoped to have everything ready to start work by March or April next. The buildings required will be numerous and extensive, and will be constructed wholly of brick or stone and iron. The company expect to manufacture much of the iron they require, and also steel, if possible.

CONSTRUCTION.

TRAINS are now running regularly on the Catskill Mountain Railroad.

THE Mexican Central Railway was inaugurated on the 28th ult., at Leon, 250 miles from the City of Mexico.

THE Sabine Pass and Texas Northern Railway has a force of two hundred men engaged on the grading.

It is proposed to build an underground railroad in Paris. The cost of its construction is put at \$30,000,000.

THE St. John and Sorel Railway Company has commenced a survey of its proposed line from St. John to Chambly Basin.

ENGINEERS of the Atchison, Topeka and Santa Fe Railroad Company are engaged in preliminary surveys to connect their road to Guaymas, Sonora, with the Mexican Central, in Chihuahua.

THE grading of the Chicago and West Michigan Railroad has been completed from La Porte to Hanna station, a distance of eighteen miles. The survey has been completed and stakes set as far as La Crosse.

THE passage of the bill granting the right of way for the Southern Pacific Railroad through the Papago Reservation is regarded very favorably, and will, it is thought, largely promote the railway interest of Arizona.

SURVEYS are being made for a new coal road—forty-five miles—from Hawley, Penn., into the Lackawanna Valley. The road is to form a link between the Pennsylvania and the New York, Lake Erie and Western railroads.

THE surveys over the proposed route of the South Pennsylvania Railroad between Harrisburg, Pa., and Wheeling, West Virginia, via Bedford and Somerset counties, have been completed. The engineers are now prospect-

ing for a route to the Fayette county coal and iron region.

THE *Riverside Press* says that there is now on hand enough iron to complete the California Southern Railroad to Colton, with three shiploads to come, and it is generally believed by those best informed that the line will be extended through the Cajon Pass during the coming winter.

THE Alliance, Niles and Ashtabula, known as the new Short Line, has been completed, and trains commenced running regularly on it between Niles and Ashtabula on the 1st inst. Hereafter all freight handled by the Pennsylvania Company to and from the West for the Mahoning Valley will be sent over this line.

THE Government of Victoria, Australia, has been empowered to expend upwards of \$12,000,000 in building additional lines of railway. Most of the roads will be for the purpose of opening up the agricultural districts. They will not be costly or intended to carry fast trains. In all there will be 56 lines built, but their aggregate length will not exceed 827½ miles.

SIR CHARLES TUPPER, the Canadian Minister of Railways and Canals, visited this city on the 28th ult., for the purpose of closing a contract with the European and American Short Line Railway Company recently formed for the construction of the first section of the line through Nova Scotia, viz: from Oxford to New Glasgow via Pictou. Sir Charles, having made thorough inquiry, and perfectly satisfied himself as to the ability of the company to successfully prosecute the work, executed the contract in the presence of Mr. Schreiber, an officer of the Department of Railways. The Short Line Railway was represented by Dr. Norvin Green, president of the Western Union Telegraph Company, and among the members of the board are Gen. Vasquez, A. L. Blackman and Erastus Wiman. Mr. Blackman intends to commence construction as soon as possible.

THE Pittsburgh, Chartiers and Youghiogheny Railway Company is rapidly pushing the construction of the first division of their road. The company under its present title was chartered to build from Chartiers (McKees Rocks) to Upper St. Clair, Allegheny county, following the valley of the Chartiers Creek to the mouth of Painters' Run, thence by a tunnel of 1,700 feet to McGlaughlin's Run, and up that stream to Upper St. Clair; from this point a charter has been obtained (and two corps of engineers are now locating the line) eastward, via Peter's Creek, (crossing the river either at Elizabeth or Monongahela City), thence across to Sewickley Creek and up the Sewickley through the coke region, and down the Loyalhanna to Latrobe. This will be the main line; various branches will be built, those located and under construction now being as follows: George's Creek, Painter's Run and Tom's Run. The latter branch will in all probability be the beginning of a line west to the Ohio River. The line will be opened to Mansfield in September, for passenger and general traffic. The construction of the roadway, bridges, etc. has been very thorough. All bridges upon the Union Line are of iron. The track is laid with

56-pound steel rails. The line of the road traverses the best and largest gas-coal field in the State, besides being a country thickly settled, and requiring an outlet by rail. In all probability this line in a few years will be the inlet to Pittsburgh of three roads—one from the East, one from the South, and another from the West.

SOME of the most rapid railway building ever done is now in process on the Canadian Pacific Railway, and before next spring the iron track will penetrate a distance of 663 miles west of Winnipeg. D. C. Shepherd, of the contracting firm of Langdon, Shepherd & Co., has just returned to St. Paul, Minn., from the scene of operations on the extreme northern route, and where the firm has a 500 mile contract which is to be completed this year. Having undergone the interviewing process Mr. Shepherd is reported to have said: "We contracted in February last to construct 500 miles of road for the Canadian Pacific Railway Company, and to complete the work during 1882. Of that number of miles about 50 were partially graded and nearly completed. Work began in March, but owing to the snow and water, the late spring, and the freight blockade, operations were greatly retarded until June 1. The initial point was Flat Creek, 33 miles west of Brandon. I have just returned from the line, and the grading is all under way. The end of the track was 127 miles west of Flat Creek on Thursday, July 27; and the grading was completed 50 miles further; in fact, the grading is all under way to Moose Jaw Creek, midway between the 105th and 106th meridians. The grading is progressing at the rate of six miles per day, and the iron is being placed at the rate of three miles per day. We have 4,200 men at work, including teamsters, and 1,600 teams. The present rate of track-laying, however, will soon be increased by four miles per day, as we shall put on two gangs of men in reliefs, and work fifteen hours out of the twenty-four instead of eleven hours, as at present. We shall show a record at track-laying which has never been surpassed on the continent. In fact the iron now is going down just as fast as it can be pulled from the cars. Notwithstanding the adverse influences encountered early in the spring, we expect to complete the 500 miles of grading before it freezes up, and perhaps fifty miles more. We shall increase our force as rapidly as possible. The track-laying will go on all winter, and we shall have the grade all ironed by spring a distance of 663 miles west of Winnipeg. Not only that, but we hope to carry it fifty miles further, beyond the crossing of the Saskatchewan River."

ORGANIZATION.

THE directors of the Southern Pacific Railroad Company, elected on the 28th ult., are: Charles Crocker, Charles F. Crocker, Charles Mayne, W. V. Huntington, N. T. Smith, J. L. Willcutt and Moses Hopkins. The officers are: Charles Crocker, president; Charles F. Crocker, vice-president; N. T. Smith, treasurer; J. L. Willcutt, secretary.

THE officers of the New York, Chicago and St. Louis Railway Company, so far chosen, are as follows: President, C. R. Cummings; first

vice-president, C. S. Brice; second vice-president, D. W. Caldwell; treasurer, B. G. Mitchell; secretary, L. M. Schwan; general manager, Lewis Williams; chief engineer, J. A. Latcha; general freight agent, G. B. Spriggs; general passenger agent, Henry Monett.

At the annual meeting of the stockholders of the Chattahoochee Railroad Company, held on the 26th ult., the following board of directors was elected: George C. Wood, James C. Holden, New York; George W. Carlisle, W. A. Goodman, George T. Stedman, Cincinnati; George S. Richardson, Ashland; Jay H. Northup, Louisa, Ky. George T. Stedman was chosen president; George S. Richardson, vice-president, and George S. Carlisle, secretary and treasurer. Charles H. Rockwell was selected as superintendent. The earnings for last year paid off all the interest on the bonds and left a balance after all running expenses of some \$14,000. It is expected that trains will be running through Peach Orchard Tunnel, 2,700 feet long, by December, when the work of mining and shipping coal will be done on a large scale.

The First Napoleon's Sleeping-Car.

W. BARNET LE VAN, M. E., of Philadelphia, says that from all accounts no doubt Napoleon I. used, in 1815, the first "sleeping, dining-room and parlor car" that was ever built. This car, or chariot, was taken at Waterloo, and was presented to the Prince Regent of England, by whom it was afterward sold to Bullock for \$12,500. It eventually found its way to Madame Tussaud's wax-work exhibition, London, where it may still be seen. This very curious and convenient chariot of the First Napoleon was built by Symons, of Brussels, for the Russian campaign, and is adapted for the various purposes of a pantry and a kitchen, for it has places for holding and preparing refreshments, which, by aid of a lamp, could be heated in the carriage. It served also for a bedroom, a dressing room, an office, etc. The seat is divided into two by a partition about six inches high. The exterior of the ingenious vehicle is in the form and of the dimensions of our large coaches, except that it has a projection in front of about two feet, the right hand half of which is open to the inside to receive the feet, thus forming a bed, while the left hand side contained a store of various useful things. Beyond the projection in front, and nearer to the horses, was the seat of the coachman, ingeniously contrived so as to prevent the driver from viewing the interior of the carriage, and yet so placed as to afford those within a clear sight of the horses and of the surrounding country. Beneath this seat is a receptacle for a box, about two and a-half feet in length and four inches deep, containing a bedstead of polished steel, which could be fitted up in a couple of minutes. Over the front window is a roller blind of strong, painted canvas, which, when pulled out, excluded rain while it admitted air. On the ceiling of the carriage is a network for carrying small traveling requisites.

THE large iron screw steamer *Excelsior* was successfully launched at the Harlan & Hollingsworth ship-yard, Wilmington, Del., on the 27th ult. She was built for the Morgan Steamship Company, of New York, is 351 feet long and 32½ in depth, and is constructed to carry 3,500 tons.

Railroads as Common Carriers.

In the proceedings before Judge Haight in the Supreme Court Chambers, instituted by the Attorney-General, Leslie W. Russell, on behalf of the people against the New York Central and Hudson River Railroad Company and the New York, Lake Erie and Western Railroad Company, for mandamuses to compel the railroads to receive and transport freight as common carriers, a decision was rendered on the 27th ult. by the Judge, in which he denies the relief sought. The main parts of the decision are as follows:

Some of the questions presented upon this application are new and of vast importance. The conflicts that from time to time arise between capital and labor present the most serious and difficult problem that the Government at the present day has to solve. It is the duty of the Court to guard and protect to the utmost every right of the poor man who is compelled to support himself and family by manual labor, and when an opportunity presents, and in a proper case, this Court will not be slow to act in his behalf. But in this proceeding it is powerless to aid him. The Court has not the power to prescribe a scale of wages. It has not the power to say that he shall work for \$1.70 per day, or that his employer shall pay him \$2 per day. Hitherto the amount of wages to be paid has been left to the parties to determine by contract, express or implied. If the power exists at all to change the law in this regard, such power rests in the legislative, and not in the judicial, branch of the Government.

The questions presented upon the motion to quash the proceedings are purely legal, and do not involve the merits. The first question presented is: Will the writ of mandamus issue on the application of the Attorney-General to compel a common carrier to discharge his duties as such? A franchise is a grant of a right or privilege to an individual or individuals or a corporation by the Government or sovereign power. The right to maintain highways, ferries and bridges to facilitate communication between different parts of the State rests in the Government or sovereign power. And these rights can be exercised by others only under grant or authority of the State. The State has conferred upon the respondent the right to build, maintain and operate a railway for public use in the conveyance of persons and property for hire. It has also conferred upon it the right of eminent domain. The right to construct a road from and to the place or places named in the charter, the maintaining and operating of it for the public use, pertain to the Government, and the Government is therefore interested in and has the power through its Attorney-General to compel the exercise of the franchises so conferred upon the respondent by the writ of mandamus. It has accordingly been held that the writ of mandamus will issue to compel a railroad corporation to operate the whole road as one continuous line, to compel the running of passenger trains to the terminus of the road; to compel a corporation to deliver grain at an elevator standing upon the line of the road, consigned to it in bulk; to compel it to run daily trains; to compel the replacement of a track taken up in violation of its charter;

to compel it to construct its road across streams so as not to interfere with navigation; to compel it to build a bridge. It is contended, however, that whilst the writ will issue to compel the exercise and discharge of the duties which belong to the State or Government, and which are conferred upon the respondent by the State, it will not issue to compel a common carrier to discharge his duty as such. One of the duties imposed by law upon railroad corporations is that of common carrier. The statute provides "that every such corporation shall start and run their cars for the transportation of passengers and property at regular times to be fixed by public notice, and shall furnish sufficient accommodation for the transportation of all such passengers and property as shall within reasonable time previous thereto be offered for transportation."

The right to become a common carrier of persons and property for hire does not pertain to or emanate from the Government. Every citizen, without grant or license, has the right to carry persons or property from point to point within the State upon such terms or for such compensation as shall be agreed upon. The liability of a common carrier of property is that of insurer of the property, except in cases of loss or destruction by the act of God or public enemies. Ample and complete remedies are provided for the recovery of all damages that the shipper or consignee may sustain through the fault or negligence of the common carrier. In the case of the people against the Susquehanna Railroad Company (57 N. Y., 161) the Court of Appeals said: "The people of this State have no general power to invoke the action of courts of justice by suits in their name of sovereignty, for the redress of civil wrong sustained by some citizens at the hands of others. When the people come into court as plaintiffs in a civil action, they must come upon their own rights for the relief to which they themselves are entitled. It is not enough for the people to show that wrong has been done to some one. The wrong must appear to have been done to the people in order to support an action by the people for redress."

It has also been held that the neglect or refusal of a common carrier to transport or deliver freight according to the law governing the duties of such carrier is a private wrong to the particular shipper or consignee concerned, and redressible by suit at the instance of such shipper or consignee, and that it is not such a public wrong as will authorize a suit by and on the part of the State.—Morawetz on "Private Corporations," at section 496, says: "The duties which devolve upon railroad companies by reason of the exercise of powers conferred by the Government for public purposes must not be confounded with their obligations as common carriers for hire. A railroad company is under obligations to the public to operate its line of road because the road was constructed with the public aid, for a public purpose. The usual duties of a common carrier then attach by virtue of the employment in which the company is engaged. If the company neglects to operate the road which it has built, this is an injury to the public in general, and redress can be obtained only through the State, by writ of mandamus. But the duties of a railroad company as common carrier for hire may be enforced by any person injured through the usual remedy by action for damages." See also sections 486 and 487; also *Ex parte Robbins*, 7 Dowling's Reports, 566. The case of the People *ex rel. Ohlen* agt. the respondent corporation, reported in the 22d Hun, p. 533, was decided

by the General Term of this department. An alternative writ of mandamus had been issued upon the application of the Attorney-General on the relation of Ohlen to require the defendant to receive and carry crude oil for the relator on its tank cars from a place called Carrollton to a place called Weehawken Docks on the defendant's road, and the usual compensation for such transportation was tendered to the defendant company. The alternative writ was quashed at Special Term and on appeal it was held that the railroad company wrongfully refused to receive and transport the oil tendered to it, but that the remedy of the party aggrieved was by an action at law; that such remedy was appropriate and adequate; and a mandamus compelling the company to receive and transport such oil should not be granted. This decision establishes the law upon the question considered, in this department, and this court is bound by it.

If a mandamus cannot issue upon the application of the Attorney-General on the relation of the party aggrieved to compel the respondent to carry his freight, how can it issue on the application of the Attorney-General alone? From my examination of the authorities bearing upon the question, I have come to the conclusion that the neglect or refusal of a railroad corporation to receive and transport freight tendered to it by citizens of the State, is a private wrong for which the citizen is entitled to recover in an action at law such damages as he has sustained—that it is not such a public wrong as will authorize the issuing of the writ of mandamus. The writ of mandamus is a high prerogative writ which will only issue to compel the performance of a duty that is clear and distinct. It will not issue in dubious or doubtful cases. It will only issue when there is no adequate or complete remedy at law.

There is still another reason why the writ asked for cannot be granted.

The order to show cause asks that the respondent corporation be required forthwith to resume the discharge of its duties as a common carrier, and also forthwith to resume the exercise of its franchises by receiving, transporting and delivering all freight and such other property as may be offered to or hereafter received by such company, etc. Section 28, of the General Railroad Act, as amended by chapter 133, of the laws of 1880, provides that every corporation formed under this act shall have power "to regulate the time and manner in which passengers and property shall be transported."

Under this statute a discretion is given to the corporation to regulate the time and manner for transporting the property that shall be tendered to it. Doubtless this discretion must be exercised reasonably, and so as not to cause damage to shippers or consignees. This discretion seems to be necessary. Many kinds of property are presented for transportation. Some have to be transported with great dispatch, as in the case of live-stock, fruits, vegetables, and articles of a perishable nature. Unperishable freight must of necessity give way to perishable articles. Again, large and unusual quantities of freight oftentimes are presented in a single day without notice to the corporation. Reasonable time must therefore be given to enable the company to get its cars to the place of delivery and transport the same.

The writ of mandamus, when it is issued, must clearly and distinctly state the act or duties which are by it commanded to be performed, so that the party to whom it is addressed may distinctly understand what he is to do. If he fails or neglects to perform, an attachment will issue against him, to the end that he may be adjudged in contempt of the process of the court. It is not in the power of the Court to look into the future and determine the kinds or quantities of freight that will be hereafter presented for transportation, and by an order specify how and in what manner the same shall be carried or what kinds shall take preference. The motion to quash must be granted.

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GOVERNMENT REVENUES, EXPENSES AND BOUNTIES.

CONGRESS is engaged in a very notable struggle with its own virtue in the matter of administering the National revenues. The taxes imposed during the war, to enable the country to meet the enormous drain of money while in actual conflict, and after fighting ceased to meet the interest and extinguish the principal of the public debt, for the most part remain, and the result is a surplus over ordinary expenditures of one hundred and fifty million dollars a year. Of course, it is practicable to pay off so much of the National debt with this plethora of money, and in great part it has been so used, with the result which might have been foreseen, that of lowering the rate of interest at which the Nation could borrow; so that at this moment it is, no doubt, practicable for the United States to borrow on bonds at two per cent per annum—the bonds themselves, however, being tax free, which brings the actual rate up to about four per cent, as compared with other taxable investments. In all probability the present time may be regarded as high-water-mark of American finance, as it is hardly likely that the demand for the use of money throughout the world will remain at so low a figure. War is, indeed, a cause of high money rates, since it offers opportunities for speculation, or in other words, sales on current fluctuations, which are apt to be sudden and extreme; but it is also, at the other extreme, a cause of cheap money, since it also stops the confidence and course of industry, and the demand for loans. Great wars, and short ones, are the fashion of these times, and they are generally succeeded by long intervals of peace. At no other era in the history of the world has there been among its inhabitants so little time lost in fighting and destroying; nor, on the other hand, so much accumulation, or so much well directed industry. Truly enough, there is yet an immense amount of misdirected, useless and worse than useless activity; but never were men so generally employed at productive labor; never were so many domesticated animals engaged in this useful co-operation; and what is of infinitely more importance, the human powers, as well as the human knowledge, have been multiplied many fold by inventions and machinery.

With nations, as with families and individuals, greater abundance gives rise to greater waste. It is no longer possible, apparently, to

conduct even a popular government on the same scale of economy as prevailed in the early days of the Republic. There were complaints of extravagance then, as there are now, when the ratio per capita of outlay is fully double. One is led to these reflections by the issues now being debated in Congress; (1) over the proposed amendments to the Revenue Bill, (2) over the ordinary Legislative and Executive appropriations, (3) the Bill of National Improvements, commonly known as the River and Harbor Bill, (4) the Land Grants to Railroads, and (5) the Pension Bills. The first named illustrates the danger and the difficulty of lodging power anywhere so that it shall not degenerate into abuse. The House of Representatives has the exclusive right of originating revenue measures; at the head of the Ways and Means Committee, chance has placed W. D. KELLEY, who is an extreme protectionist (which may be accounted for by the fact that no other could be elected from his district), and who is otherwise distinguished only for his many vagaries and heresies. The result is a Revenue Bill designed to continue as much as possible of the protection of manufactures, without relieving the customs tariff of many of its absurd inequalities. It satisfies neither party, and the party in power feels its danger of being made responsible for it. It is part of the policy of squandering, which has become intolerable in nearly all directions. The Army, the Navy, the Legislators, the Judiciary, the Pensioners, the officeholders, are over-paid, and the public money is being lavished on contractors for Naval vessels, for Indian supplies, for Public buildings at all manner of unimportant places, and notoriously for so-called improvements to the water-courses and harbors in nearly every State of the Union. This river and harbor business is a survival from the early days, when the coast and navigable rivers were the chief means of transportation, aside from animal power; but the conditions of transportation have changed, while the water appropriations keep increasing as if railroads had never been heard of. From the amount of solicitude shown by Members and Senators to obtain as large a slice as possible of this annual appropriation for rivers and harbors, one would suppose Members were so stupid as to continue it as a praiseworthy art. It is really an attempt to bribe the voters with their own money, and signalizes the decay of representative probity.

Contrast this zeal to pay out of the Treasury, year after year, money to deepen creeks which are not in any legitimate sense navigable streams at all—mere "push-boat" water-ways—with the backwardness of paying the real

debts of the country, such as the Japanese Indemnity, the Geneva Award, and a thousand other debts to contractors, whose survivors suffer by the neglect of the Government. The Congress assumes authority to fix its own rates of compensation for carrying the public mails on railroads, and lays down very arbitrary rules for its service; the railroad companies comply rather than have a struggle with so irresponsible a body as Congress, knowing that the people desire the benefit of cheap postage even though the Government steal a part of the transportation service.

Contrast the evident desire of Congress to favor the water navigation of the several districts with its hostility to railroad corporations who have accepted its promises of lands as inducements to construct railroads. Just now the two great remaining unearned land grants—the Northern Pacific and the Atlantic and Pacific—are being earned as rapidly as capital can do so, not less than 300 miles of rails per annum are going down in that remote and uninhabited region; and yet Congress, in a severe spasm of virtue, or rather in a desperate resolve to do something for a show of economy, as an offset to its extravagance in all other directions, is with difficulty restrained from confiscating the remaining land-grants. In plain words, after having prodigally given away millions of money, which must be raised by taxation, it proposes to make a repudiation for economy by stealing something from the railroad corporations—that is essentially and legally the force of what is now proposed. Fortunately the courts of all civilized nations have passed judgment upon like attempts. They say it is not now allowable for a government, any more than for an individual, to set traps for those who confide in its promises. The United States had a two thousand mile strip of territory between the Missouri River and its west coast that was useless as a National resource, and a positive barrier to its communication and defense. The only, the inevitable way to improve it was to devote a part of the land to putting railroads through it. This was done on four different parallels of latitude—the 48th, the 42d, the 35th, and the 32d. The 42d and 32d have been put in operation, the other two are rapidly approaching completion. The inducements of land do not seem to have been excessive in amount, since two of the largest and best grants failed to enlist capital to complete the roads within the specified terms. The mistake that was made, undoubtedly, was in committing the later undertakings to a single corporation instead of opening them to competition from either end, as was done in the case of the original Pacific Railroad. The effect of

this in the case of the Northern Pacific, the Texas and Pacific, and the Atlantic and Pacific was to create a sort of exclusive claim, or privilege, of building roads along those routes. The superior enterprise of the State corporations—the Southern Pacific, in California, and the Oregon Transportation Company, in Oregon—has, in a measure, mitigated that mistake. The lands ought to have been so given as to belong to such companies as might build contiguous roads through them, not as a bounty to any particular corporation. The matter has no great significance now, but for the fact that owing to this original blunder Congress is at present disposed to deprive the companies which built along the 32d parallel of their justly earned reward of lands, apparently as a sort of penalty for the superior enterprise and fidelity in pushing it through to completion within the ten years' term. In other words it is sought to put the United States in the attitude of taking advantage of a technicality in language and get an important military road constructed along its border without giving the promised aid. There is a long line of decisions that a grantor of land, on condition of subsequent specific performance, cannot, if the performance is not strictly kept, stand silently by and see the grantee continue his improvements on the land, and then repudiate the bargain. Such is the standard of honor now prevailing in our National Legislature that a majority can be found to recommend the Nation to do that which, if done by a private person, would stamp him as a cheat and a swindler.

Fitchburg Railroad Improvements.

THE work of laying a double track and making various other improvements on the line of the Vermont and Massachusetts division of the Fitchburg Railroad has made steady progress this season, and before winter the second track will be completed to Orange. With the exception of about four miles the track is laid with steel rails from Fitchburg city to Greenfield. Between Ashburnham and Gardner six of the seven highway crossings at grade, some of which were very dangerous, have been abolished or are soon to be, and the highways have been carried over or under the track. The only remaining grade-crossing will be abolished next year. Work on the new location between Baldwinville and Royalston has been vigorously pushed and one track is laid, except a gap of about 500 feet, which includes a proposed bridge over Otter River, and a ledge which remains to be excavated. This change of location dispenses with four long bridges over Miller's River, and five grade crossings, besides reducing the maximum grade of this part of the road from 50 to 21 feet. The second track has been laid two miles east of Royalston station. West of Royalston the second track is laid about two-thirds of the way to Pequign. The long ledge, nearly one mile east of Pequign,

has been excavated for the second track and much of the stone has been used for abutments and retaining walls. The experiment of cutting a new channel for Miller's River just east of Pequign has been attended with entire success, and the whole current now passes through the new channel. The railroad has been swung to the south at this point and the embankment is nearly finished across the old channel of the river. The change does away with two long bridges, and the expense of the change is only about two-thirds the cost of new bridges at this place. At Miller's Falls a new depot, 63x24 feet, is in process of construction to replace the one burned last Christmas, and will accommodate both the Fitchburg and New London Northern roads. The improvements are made under the supervision of assistant superintendent E. K. Turner, and the work is of the most thorough and substantial character.

SIR JOHN and Lady Rose, accompanied by Mr. Robert Herbert, Under Secretary for the Colonies, arrived in this city from London on the 30th ult. They intend to make a short tour of the United States and Canada. They came in the Guion Line steamer "Alaska," which made the voyage from Queenstown to Sandy Hook in seven days and seventeen minutes, the fastest western voyage on record. Her fastest time from New York to Queenstown was six days and twenty-two hours.

THE Pittsburgh Chronicle says that the first railroad engine built in this country was of one-horse power, had a three and a-half inch cylinder, and a fourteen inch stroke, while the boiler which generated the steam was about the size of an ordinary wash boiler, stood upright, and was, in fact, a multi-tubular boiler. To secure the requisite pressure of steam to drive the machine a small bellows arrangement was provided, which was kept in action by means of a belt running over a driver, and the latter was kept revolving by a cord running on the wheels. The wheels of this locomotive were two and one-half feet in diameter and were geared to the engine with cogs. The engine could pull a car-load of passengers at the rate of twelve miles an hour.

A LATE Danish invention, intended to prevent the wheels of cars from "grinding" when passing sharp curves, is thus described: The axle is divided in the center, the end on one-half having a hollow and that of the other a corresponding projection, somewhat like a ball-and-socket joint. The desired stiffness is imparted by a tube which surrounds the axle, and extending between the naves of the wheel bears against gun-metal collars. At the center, between the tube and the axle, is a gun-metal bearing in which the axle can revolve. The wheels act in such a manner that in running along a straight rail both they and the axle turn together as in an ordinary pair of wheels, but on passing round a curve the axle slips in its joint, so that the wheel on the inner radius of the curve is retarded and the outer wheel accelerated in proportion to the sharpness of the curve, with the result of securing greater smoothness of travel in the vehicle and less wear and tear of the tire and the rail.

[From our Special Correspondent.]
OUR ST. LOUIS LETTER.

THE rapid strides which are being made by the Paramore narrow-gauge lines in Arkansas and Texas, and the judicious combination entered into by their owners with the Illinois Central Railroad, make them a prominent rival to what is called the "Gould system," which embraces the Iron Mountain, Missouri Pacific, and several leased lines. Col. Paramore and his colleagues have now formed a perfect chain of connections between all the principal points East and West, and their roads are receiving a fast-growing patronage from all sections. There can be no doubt of their popularity, in the West at least, where a large majority of the people (whether rightly or otherwise it is not for your correspondent to say) have come to look upon the aforesaid "Gould system" or combination in the light of a huge monopoly. As to the immense power wielded by Mr. Gould in the commercial destinies of the Southwest, there is no question. If wisely used he can subserve more than any other man the business interests of that region, for his lines traverse the most remote quarters, and even desert places as yet scarcely touched by civilization, and unpeopled save by the road agent and kindred involuntary pioneers, are crossed and re-crossed by oftentimes empty coaches in order to keep up a through line to San Francisco. The only apprehension business men have hitherto entertained is, that this great power so controlled by a single individual might be used to the detriment of Western commerce, and hence they by no means disguise their satisfaction now that they are assured the Paramore lines are to be not only independent of Mr. Gould's great scheme but an active and dangerous rival in catering to the demands of the public. In all truth, the commercial world in which we Western people move is a little "scary" of Mr. Gould's speculative maneuvering, and welcomes any competing line which, like Col. Paramore's, has "come to stay." It is because of this that folks hereabouts who are not afraid to express their opinions, favor the narrow-gauge connections so strongly in opposition to the Gould roads. And it is because of this that the legislatures and people of Arkansas and Texas sympathize so cordially with the Colonel in his efforts to divert from the Gould combination sufficient freight and passenger traffic to sustain and successfully operate an opposition line. That he has done so is now a well-established fact; and that a keen and lively rivalry exists between the two combinations is equally certain. Business men in this section universally deprecate the entrusting of their affairs to any one railroad. They go in for healthy competition, and hence the rise in the Paramore Railroad stock. There is no truth whatever in the rumor echoed around here a short time since to the effect that Mr. Gould was negotiating so as to absorb and swallow up the younger line, and your correspondent can state, on the best possible authority, that there is no probability whatever of any such contingency arising. Col. Paramore, as a Western man, takes a patriotic and praiseworthy pride in furthering and developing the resources of this part of the country, and scouts the idea of his line

ever getting into the hands of any clique or combination inimical to the welfare of Western commerce. Merchants and others in this as well as the adjoining cities have the utmost confidence in the sincerity of Col. Paramore, and generally express themselves as determined to stand by him and his road in opposition to the Gould combination. The situation is an interesting one just now, and judging from the immense outlay the Texas and St. Louis Railroad is making in the way of equipment, etc., it is certainly evident there will be no "backing down" on its part in the coming fight for supremacy.

A new branch of road, 20 miles in length, is to be completed November 1st from Doniphan, in this State, to connect with the Iron Mountain at the most practicable point in Butler county. Col. W. H. Richter, of Ripley county, is the moving spirit in the undertaking, and Capt. Hayes, Col. Hoxie and Chief Engineer Morley guarantee the completion of the line at the time named, provided right of way is obtained. In this there will be no difficulty, so the work will begin immediately.

There is a strong probability that the Marshall and Northwestern Railroad will soon run its line into and open a branch at Gilmore, Tex. A delegation of citizens of the latter place have just waited on President Hartzwell at Pittsburgh, and obtained assurances to that effect.

Capt. R. S. Hayes, senior vice-president of the Gould lines, who has been East for several days past, has now gone to Galveston, Texas, on important business connected with his roads. He is accompanied by Col. Hoxie, general manager of the Iron Mountain.

Capt. C. W. Rogers, general manager of the Frisco line, has just returned from an inspection tour over the Arkansas branch of the road. He passed with his car through the Boston Mountain Tunnel, which is now opened to traffic.

Col. A. A. Talmage, general manager Missouri Pacific, has gone East.

Mr. O. W. Ruggles, general passenger agent, Michigan Central Railroad, Chicago, made a flying visit to his numerous friends in this city a few days ago.

Mr. G. D. Bacon, general Western passenger agent, Ohio and Mississippi Railroad, has returned from a trip to Colorado and New Mexico.

Mr. J. C. Gault, second vice-president of the Wabash road, has been East for the past week on business connected with his line. He returns home to night.

Mr. H. C. Townsend, general passenger agent of the Wabash, has been for the past few days in New York in the interest of his road.

The Colorado Mining Exposition opens to-day at Denver, and large crowds of our citizens are heading for the show, as all the railroads are issuing tickets at reduced fares. The exhibition promises to be a grand success.

Mr. Sanborn, of the C., B. and Q., has been enjoying the mountain scenery of Colorado for the past fortnight.

Col. J. W. Paramore, president Texas and St. Louis Railway, has been presented with one of the most elegant, expensive and beautifully finished easy-chairs in St. Louis. It is the gift of

Mr. W. G. Veal, president of the Dallas Board of Trade, and is intended as a slight token of regard towards the Colonel for his efforts in promoting the commercial prosperity of Texas by the completion of his narrow-gauge lines. The chair is unique and artistic in design, and Texas antlers and horns are charmingly woven together in its construction.

The Atchison, Topeka and Santa Fe road during 1882 earned \$16,360,000 gross, \$6,871,000 net, and after paying a 6 per cent dividend and all other charges, will still have a net surplus left of \$2,491,000.

The Texas and St. Louis Railway will soon have over 700 miles in operation. The company has ordered 20 passenger locomotives, has 20 "moguls" of 26 tons each on hand, and several consolidated engines of 30 tons each. A contract has been let to the United States Rolling-Stock Company for 900 freight cars, 50 caboose cars, 50 stock cars, etc., while still another contract has been closed with the Pullman Palace Car Company for eight first-class passenger cars, 8 second-class passenger cars, 8 mail and express cars and 8 baggage cars. The same company are also building for this road 6 magnificent sleepers, and altogether the equipment of the Paramore narrow-gauge lines in Arkansas and Texas promises to be equal to any other road in the country for comfort and convenience. P. H. T.

St. Louis, August 1, 1882.

JENKINS VAN SCHAIK and H. K. Thurber have been appointed Brooklyn Bridge trustees to fill vacancies.

THE National Mining Exposition was opened at Denver, Colorado, on the 1st inst. Hon. Wm. D. Kelley, of Pennsylvania, made the opening address.

FONTAINE Engine No. 2 recently arrived at St. Thomas from Detroit, and will be got in readiness for the fast trip over the Canada Southern Railway.

THE City Passenger Railway Company of Montreal, have ordered two new cars from Schenectady, N. Y., one open and one closed. They have all the latest improvements, and are intended for the St. Catherine street route.

THE Pennsylvania Company is now building all its passenger coaches one foot narrower than the ordinary pattern, reducing the width by making the aisle narrower. The object is to make the car lighter, and to lessen the resistance. The pattern adopted reduces the weight 5 per cent and the resistance fully 10 per cent, yet the coach is just as convenient and rides easier than the ordinary wide coach.

THE bridges on the Palmer-Sullivan Mexican Railway now in course of construction between the City of Mexico and Paso del Norte, on the Rio Grande, were contracted for with an American bridge company. On revising the estimate the company discovered that it was not possible to compete with English builders at the current rates for steel and iron. So the plans and working drawings were sent to England, where the iron work is to be manufactured and shipped in bond via New Orleans and St. Louis to its destination.

[From Our Special Correspondent.]

OUR CINCINNATI LETTER.

It is stated by good authority that control of a majority of the Cincinnati Northern stock has been secured by Mr. R. M. Pomeroy, and the remainder of the Boston syndicate, and that also some important changes will take place at the Company's annual meeting, which will be held in November. Negotiations are pending, it is said, with the Boston parties, for an exchange of all their stock in the Cincinnati Northern, for the Avondale Branch, which will doubtless become of considerable value when completed as far as Clifton, and placed in good running order.

Mr. John Pontius has been appointed traveling engineer of the Columbus, Chicago and Indiana Central division of the Pittsburgh, Cincinnati and St. Louis Railway, and his headquarters will be at Columbus, Ohio. The following circular, containing the rules governing this office has been issued by Supt. Miller: "Road foremen of engines report to and receive their instructions from the superintendent. They must frequently ride upon the engines and give instructions to enginemen and firemen, in regard to the proper working and firing of the engines to obtain the greatest economy in the consumption of fuel and stores. They must give particular attention to the capacity of the engines for generating steam, observe that the standard pressure is not exceeded, and see that the boilers are washed out as often as necessary. They must see that the engines are equipped with signals, tools and every article necessary, and must report when they are not in good working order. They must report the number of cars to be allotted to each class of engines, and when engines of freight trains are not given cars to their full capacity or when they are overloaded. They will consult and advise with the master mechanic and engine-house foreman in regard to the daily condition and requirements of the engines. They will report the qualifications of enginemen and firemen, and any violation of the rules or neglect of duty which may come to their knowledge, and advise the superintendent of all matters relating to the economical and efficient working of the engines." The duties required by the above are certainly of such a nature as to cause the position of traveling engineer to be anything but popular.

A Bill in Chancery has just been filed by Messrs. Robert Garrett & Son, of Baltimore, Md., in the United States Court at Columbus, vs. the Steubenville and Indiana Railroad Company and others, asking that liens on the road be duly marshalled and that the road be sold. The plaintiffs claim the first lien, which, together with interest, amounts to something over \$200,000, being balance due on a former decree. The road is now being operated by the Pittsburgh, Cincinnati and St. Louis Railroad, and embraces that portion of the railway between Newark and Steubenville.

A petition on behalf of the State of Ohio vs. the Cincinnati and Milford Railroad Company, to forfeit its franchises has just been filed by Prosecuting Attorney Outcalt, and the determination of the case will be expected with

considerable interest. The charges made in the petition are:—

1. Non-user, in that the company was incorporated as a railroad company 1872, with power to build, operate and maintain a railroad from Cincinnati to Milford, and that it has not complied with the obligations of its charters in any respect, has built no road, acquired no rights of way, made no surveys, and acquired no rolling-stock.

2. Mis-user, in that being incorporated with power to build, maintain and operate a railroad from Cincinnati to Milford, it has, instead of so doing, allowed a stock-yard's company to use its name in building a switch about 500 yards in length, connecting the Hamilton and Dayton road with the yards of said stock-yards company; that it issued the full amount of its capital stock, although nothing was paid thereon by any subscribers, and that said stock was distributed pro rata among the holders of the stock of the United Railroad Stock-Yards Company, which company guaranteed the payment of dividends upon said stock, and leased said switch, which it has ever since held and controlled. The State prays the Court, upon the foregoing grounds, to forfeit the charter of the company.

Stockholders of the Cincinnati, New Orleans and Texas Pacific Railroad, i. e., those outside of the Erlanger syndicate, have not at present particularly encouraging prospects, the company having recently passed its quarterly dividend, and the stock not now being marketable at over 80. The look-out in the face of many rumors that are now current does not present a very hopeful phase.

Recent developments also show that an over-issue of stock in this company to about the tune of \$300,000 has been made by G. E. Doughty, secretary to the company, and now deceased; certificates having been signed in blank by the president and filled up by Doughty, by whom they were then hypothecated. It is stated, however, that the deceased secretary's estate is sufficient to make the amount good, though in some quarters there are misgivings as to this point.

On July 29 articles of incorporation for the Ohio River and Indiana Railroad were filed with the Secretary of State. Among its incorporators are C. A. Layton, N. D. Shaw, J. W. Leiter and J. Wilson, all of Wapakoneta, Ohio. The project is the Ohio division of the proposed through line from New York to Council Bluffs, which is represented by Hon. R. W. Thompson and a New York syndicate. The capital stock of the company is \$5,000,000.

Mr. Chas. H. Clough, for a number of years ticket agent at the Dayton Union Depot, has resigned his position, and has made an engagement with the N. T. C. and St. Louis Railroad Company, to take effect October 1, with headquarters at Chicago.

General W. B. Shattuck has just returned from the East, and says that in his opinion the fall passenger business will be the largest ever known.

An Indianapolis authority states that there will be no immediate changes of Bee Line officials on account of the purchase of the Indianapolis and St. Louis road. It is the intention,

however, before many months, to consolidate the auditor's, treasurer's and car accountant's departments of the Indianapolis and St. Louis with the Cleveland, Columbus, Cincinnati and Indianapolis, and they will therefore be removed to Cleveland, Ohio. C. C. Gale will continue as superintendent of the Indianapolis and St. Louis, without change of headquarters.

Mr. P. P. Young, traveling agent of the Chesapeake and Ohio, has resigned his post in order to accept the general agency of the Northern Pacific for all the territory southeast of Chicago. His headquarters will be in this city.

A report from Canton, Ohio, says that twenty-four conductors, engineers, brakemen, telegraph agents and station agents of the Connotton Valley Railroad, left in a body on the 31st ult., anticipating a discharge by W. W. Hungerford, the new manager. It is also said that to demonstrate their views as to the new management, they opened a switch with the evident intention of wrecking a freight train, but fortunately were unsuccessful in their attempt. The vacant conductors' positions have been filled with new men from the Texas and Mexican Railroad, with which the new general manager was recently associated.

List of Patents for Inventions Relating to Railway Interests.

[Reported expressly for the AM. RAILROAD JOURNAL.]

- 10,170. Railway Frog and Rail Coupling: J. W. CLOSE, Buffalo, N. Y., reissue.
- 261,831. Car Coupling: J. I. DAVIS, Jeffersonville, Ind.
- 262,013. Locomotive: LEON DEBARNET, Buenos Ayres, Argentine Republic.
- 261,923. Safety Attachment for Railway Cars: E. HENN, Jersey City, N. J.
- 262,071. Locomotive Furnace: E. MALLETT, JR., New York, N. Y.
- 262,085. Railway Car: J. MILTON, Hamilton, Va.
- 262,104. Car Coupling: M. OWENS, Quincy, Ill.
- 261,953. Car Coupling: D. B. PRATT, Perry Center, N. Y.
- 261,872. Car Coupling: D. P. PRESCOTT, Vernon, Vt.
- 261,882. Hand Car: H. T. STOCK, Toledo, Ohio.
- 261,883. Grain Car Door: G. G. TANNER, Indianapolis, Ind.
- 262,169. Locomotive Head Light: E. WILHELM, BUFFALO, N. Y.

THE Phoenix Iron Company, Phoenixville, Penn., will begin operating new mechanical rotary puddlers in about ten days. Trouble with workmen necessitated the introduction of the mechanical puddler.

THROUGH drawing-room cars will be run on the Housatonic Railroad, between Pittsfield and New York, on trains leaving New York at 3:45 P. M., arriving in Pittsfield at 9:35 P. M., and leaving Pittsfield at 3:20 P. M. arriving in New York at 9:00 P. M.

THE ship Glendon, Capt. Thatcher, sailed from Philadelphia on the 29th ult., for New Tacoma, with twenty-four hundred tons of steel rails for the Northern Pacific Railroad. Four bars of these rails, thirty feet in length make one ton of iron. The rails will cover a single-track road for a distance of twenty-five miles. They were manufactured by the Pennsylvania Steel Works, at Steelton, Penn.

THE STOCK EXCHANGES AND MONEY MARKET.

New York Stock Exchange.

Closing Prices for the week ending Aug. 2.

	Th.27.	F.28.	Sat.29.	M.31.	Tu.1.	W.2.
Adams Express.....	139 1/4	140				139
Albany and Susq.....						
1st mortgage.....						
2d mortgage.....						
American Express.....	95	95	95 1/2	95	94	
Burl. O. R. & Nor.....	80					79
1st mortgage 58.....	101 1/4		101 1/4	101 1/4	101 1/4	
Canada Southern.....	64 1/4	64 1/4	63 1/4	62 1/4	63 1/4	64 1/4
1st mortgage guar.....	93 1/4	93 1/4	93 1/4	93 1/4	93 1/4	
Central of N. Jersey.....	82	81	81	79 1/2	81 1/2	81 1/2
1st mort. 1890.....		118 1/2				
78, consol. ass.....						112 1/2
78, convertible ass.....						
78, Income.....						107 1/2
Adjustment.....						108
Central Pacific.....	96 1/4	96 1/4	96	95 1/2	96	95 1/2
68, gold.....	116 1/4					117
1st M. (San Joa).....						116 1/4
1st M. (Cal. & Or.).....						
Land grant 68.....						106 1/4
Chesapeake & Ohio.....	24 1/4	25 1/4	25 1/4	25 1/4	25 1/4	25 1/4
1st pref.....						38 1/2
2d pref.....						27
1st mort., series B.....	85 1/4	85 1/4	85 1/4			
Chicago and Alton.....	140	141		139 1/4	139 1/4	141
Preferred.....						
1st mortgage.....						121
Sinking Fund.....						113 1/4
Chi., Bur. & Quincy.....	134 1/4	134 1/4	134 1/4	134	134 1/4	134 1/4
78, Consol. 1903.....						
Chi., Mil. & St. Paul.....	120 1/4	120 1/4	120 1/4	120 1/4	120 1/4	121 1/4
Preferred.....	134 1/4	134	134			136
1st mortgage, 88.....						135
2d mort., 7 3-108.....						
78, gold.....						
1st M. (La. C. div.).....						
1st M. L. & M. div.....						
1st M. (L. & D. ext.).....						
1st M. (L. & D. div.).....	117 1/4					
1st M. (O. & M. div.).....						
Consolidated S. F.....	121 1/4					
Chi. & Northwestern.....	137 1/4	137	137	137 1/4	137 1/4	148
Preferred.....	150	150 1/2	151 1/4	151	152	165
1st mortgage.....						102
Sinking Fund 68.....						
Consolidated 78.....						
Consol. Gold b'ds.....	127 1/4					126 1/4
Do. reg.....						
Chi., R. Isl. & Pac.....	133	133 1/4	133 1/4	133 1/4	133	133 1/4
68, 1917, o.....	128 1/4					
Clev., Col., Cin. & Ind.....	90 1/4	89	89	84	87	88 1/4
1st mortgage.....	123					
Clev. & Pittsburg gr.....	140	139				
78, Consolidated.....						125 1/4
4th mortgage.....						
Col., Chi., & Ind. Cent.....	16	16 1/4	15 1/4	15 1/4	15 1/4	15
1st mortgage.....						
2d mortgage.....						
Del. & Hud Canal.....	117	116 1/4	116 1/4	114 1/4	115 1/4	115 1/4
Reg. 78, 1891.....						
Reg. 78, 1884.....	106	106				
78, 1894.....	118 1/4					
Del., Lack. & Western.....	130 1/4	138 1/4	138	137 1/4	139	138 1/4
2d mortgage 78.....						
Consol. 1907.....						
Erie Railway.....						
1st mortgage.....						
2d mort. 58, ext.....						
3d mortgage.....						
4th mort. 58, ext.....						
5th mortgage.....						113
78, Consol. gold.....						130
Great West. 1st mort.....						
2d mortgage.....						102 1/4
Hannibal & St. Jo.....						
Preferred.....	89 1/4	91 1/4	93 1/4	93 1/4	93 1/4	94
88, Convertible.....						107 1/4
Houston & Tex. Con.....	91 1/4	90 1/4	88			90
1st mortgage.....						110
2d mortgage.....						126
Illinois Central.....	138 1/4	137 1/4	137 1/4	138 1/4	137 1/4	138 1/4
Lake Shore & Mich So.....	116 1/4	115 1/4	115 1/4	114 1/4	116 1/4	114 1/4
Consol. 78.....						
Consol. 78, reg.....						126
2d Consolidated.....						
Leh. & W. B. con. ass.....						106
Long Dock bonds.....						
Louisville & Nash.....	74 1/4	74 1/4	75 1/4	74 1/4	75 1/4	75 1/4
78, Consolidated.....	117 1/4					
Manhattan.....	53 1/4					54
1st pref.....						90 1/4
Met. Elevated.....						83 1/4
1st mortgage.....	99 1/4	99 1/4		99 1/4	99 1/4	99 1/4
Michigan Central.....	99 1/4	98 1/4	99 1/4	98 1/4	100 1/4	100 1/4
78, 1903.....		124	124			124 1/4
Morris & Essex.....						125 1/4
1st mortgage.....						125

2d mortgage.....						
78 of 1871.....						
78, Convertible.....						
78, Consolidated.....	121 1/4					
N.Y. Cen. & Hud. R.....	136 1/4	135 1/4	135 1/4	135 1/4	135 1/4	135 1/4
68, S. F., 1883.....						
68, S. F., 1887.....						
1st mortgage.....						
1st mortgage, reg.....						
N. Y. Elevated.....						
1st mortgage.....	116 1/4					115 1/4
N. Y. & Harlem.....						
Preferred.....						
1st mortgage.....						
1st mortgage, reg.....						
N. Y., Lake Erie & W.....	41	40 1/4	40 1/4	40	40 1/4	40 1/4
Preferred.....	80 1/4	80 1/4		79 1/4	79	
2d Consolidated.....	98 1/4	98 1/4	98 1/4	98 1/4	98 1/4	98
New 2d 58 fund.....						94
N.Y., N. Hav'n & Hart.....						
North Mo. 1st mort.....						
Northern Pacific.....	49 1/4	49 1/4	49	48 1/4	50	50
Preferred.....	89 1/4	90	89 1/4	89 1/4	91 1/4	90 1/4
Ohio & Mississippi.....	38 1/4	39 1/4	39 1/4	38 1/4	39 1/4	40
Preferred.....						
2d mortgage.....						
Consolidated 78.....						
Consol. S. Fund.....						
Pacific Mail S. S. Co.....	47 1/4	47	46 1/4	46 1/4	47 1/4	46 1/4
Pacific R. R. of Mo.....						
1st mortgage.....	108 1/4					
2d mortgage.....						111
Panama.....	165			165		
Phila. & Reading.....	62	62	62 1/4	60 1/4	62	61 1/4
Pitts., Ft. W. & Chl. gtd.....	133 1/4					
1st mortgage.....						
2d mortgage.....						
3d mortgage.....						
Pullman Palace Car.....	130 1/4	132	129	128 1/4		128
Quicksilver Min'g Co.....	11 1/4	12	11	11		
Preferred.....						
St. Louis & San Fran.....	43	43	43 1/4	42 1/4	43 1/4	43 1/4
Preferred.....	59 1/4	60	61 1/4	60	61	61
1st Preferred.....		98	100		99 1/4	
St. L., Alt'n & T. H.....	35 1/4	35 1/4	35	36	35 1/4	
Preferred.....	80	78 1/4		79 1/4	79 1/4	
1st mortgage.....						
2d mort. pref.....						
Income bonds.....	95			96		
St. L., Iron Mt. & S.....						
1st mortgage.....						
2d mortgage.....						108
Toledo and Wabash.....						
1st mortgage.....						
2d mortgage.....						
78, Consolidated.....						
St. Louis Division.....	105 1/4					
Union Pacific.....	117	116 1/4	116	116 1/4	117 1/4	117 1/4
1st mortgage.....	117					116 1/4
Land Grant 78.....	114 1/4					
Sinking Fund 88.....	123					123
United States Ex.....				74 1/4		74 1/4
Wabash, St. L. & Pac.....	38 1/4	38 1/4	37 1/4	37 1/4	38 1/4	39 1/4
Preferred.....	68 1/4	68 1/4	68	67 1/4	68	68 1/4
New mort. 78.....						
Wells-Fargo Ex.....	128					123
Western Pacific b'ds.....	110	110				
Western Union Tel.....	89 1/4	89 1/4	89 1/4	88 1/4	90 1/4	
78, S.F. conv., 1900.....				118		118

FEDERAL STOCKS.—

U. S. 4 1/2, 1907, reg.....	120 1/4	120 1/4		120 1/4		
U. S. 4 1/2, 1907, coup.....	120 1/4	120 1/4		120 1/4		
U. S. 4 1/2, 1891, reg.....	120 1/4			114 1/4		
U. S. 4 1/2, 1891, coup.....	120 1/4			114 1/4		
U. S. 58, cont'd at 3 1/4.....	101 1/4	101 1/4	101 1/4			101
U. S. 68, cont'd at 3 1/4.....	101 1/4			101 1/4		
Dt. of Col. 3-658, reg.....	108 1/4					
Dt. of Col. 3-658, coup.....						

Boston Stock Exchange.

Closing Prices for the Week Ending Aug. 2.

	Th.27.	F.28.	Sat.29.	M.31.	Tu.1.	W.2.
Atch., Top. & San. Fe.....	94	94	93 1/4	93 1/4	94	94 1/4
1st mortgage.....						120 1/4
Land Grant 78.....	115 1/4					115 1/4
Boston & Albany.....	167 1/4	167		168	167 1/4	167
Boston and Lowell.....						102 1/4
Boston & Maine.....	148	148	148	147 1/4	147 1/4	
Boston & Providence.....				160	160	
Bos'n, Hart. & Erie 78.....	57 1/4	56 1/4	56 1/4			53 1/4
Burl. & Mo. R.L.G. 78.....						
Burl. & Mo. R. in Neb.....						
68, exempt.....						122
48.....						
Chi., Burl. & Quincy.....	134 1/4	134 1/4	134 1/4	134 1/4	134	135
Cin., Sand & Clev (\$50).....	28 1/4			59 1/4	29	
Concord (\$50).....						
Connecticut River.....						
Eastern.....	49	48 1/4	48 1/4		45 1/4	47
New 4 1/2 Bonds.....	109 1/4			109 1/4	109 1/4	

Fitchburg.....	131 1/4		131	132		
N. Y. & New England.....	57 1/4	57 1/4	56 1/4	54 1/4	53 1/4	53 1/4
78.....	117			116 1/4		116 1/4
Northern N. H.....						
Norwich & Worcester.....						
Ogden & Lake Cham.....						
Old Colony.....	132 1/4			134	134 1/4	134 1/4
Ph., Wil. & Balt. (\$50).....						
Portl'd, Saco & Ports.....						
Pueblo & Ark Val 78.....	115				115	114 1/4
Pullman Palace Car.....	131				130	
Union Pacific.....	116 1/4			117		117 1/4
68.....						116 1/4
Land Grant 78.....						
Sinking Fund 88.....				119 1/4	119 1/4	
Vermont & Mass.....						
Worcester & Nashua.....						
Cambridge (Horse).....						
Metropolitan (Horse) 76.....						
Middlesex (Horse).....						
Cal. & Hecla Min'g Co.....	243	243		243		
Quincy.....					55	55 1/4

Philadelphia Stock Exchange.

Closing Prices for the Week Ending Aug. 1.

	W.26.	Th.27.	F.28.	Sat.29.	M.31.	Tu.1.
Allegh'y Val. 7 3-108						
78, Income.....	51%	51%	52		51	
Buff., Pitts & West.	21%	21%	21%	21%	21%	21%
Cam'd'n & Am. 68, '83						
68, 1889.....						
Mort. 68, 1889.....	112%					
Camden & Atlantic.						
Preferred.....	43					
1st mortgage.....						
2d mortgage.....						
Catawissa.....						
Preferred.....	55					
2d pref.....						
78, new.....						
Del. & Bound Brook						
78.....						
Elmira & Williamspt						
Preferred.....						
Hunt. & B. Top Mt.	15	15			15	
Preferred.....						
2d mortgage.....						
Lehigh Navigation.	42%	42%	42%	43	42%	43
68, 1884.....	103%					103%
Gold Loan.....						
Railroad Loan.....	115%					
Conv. Gold Loan.	116%					
Consol. Mort. 78.					116%	116%
Lehigh Valley.....	61%	61%	62	63%	63	62%
1st mort. 68, coup						
1st mort. 68, reg.	123					
2d mort. 78.....						
Consol mort. 68.						
Consol.mtg.68,reg						
Little Schuylkill.....				57		57
Minehill & Sch. Hav'n				61%	61%	
North Pennsylvania	65					64%
1st mortgage 68.						
2d mortgage 78.						
Gen'l. mtg. 78, coup						
Gen'l. mtg. 78, reg						
Northern Central.						49%
58.....				96%		
Northern Pacific...	49	49%	49%	49%	48%	50
Preferred.....	89	89%	90	89%	89%	91%
Pennsylvania R. E.	62%	62%	62%	62%	61%	60%
1st mortgage.....						
Gen'l mort.....						
Gen'l mort reg.....						
Consol. mort. 68.						
Consol. mort. reg						
Pa. State 58, new...						
do 48, new.....	113					
do 3 1/8, 1912...						
Phila. & Reading.....	30%	31	31	30%	30%	30%
1st mortgage 68..						
78 of 1893.....						
78, new convert.....				78		
Consol. mort. 78.		124%				
Consol. mort. reg.						
Gen'l mort. 68.....	96%	96%	96%			
Def. Income bonds						
Philadelphia & Erie	17%	17%				
1st mortgage 58.....	105		105	105		
2d mortgage 78.....			114%		114%	114%
Pittsb., Cin. & St. L. 78					100	
Pitts., Tit. & Buff. 78.						96%
Schuylkill Navi't'n.						
Preferred.....					13%	
68, 1895.....						107%
68, 1907.....	91		91			91
United Co. of N. J.....	188%	188	188%			
Hestonville, (Horse)						
Chesnut & Wal. (do.)						

Baltimore Stock Exchange.

Closing Prices for the Week Ending Aug. 1.

W. 26. Th. 27. F. 28. Sat. 29. M. 30. Tu. 1.

Baltimore & Ohio...	110 1/4	111	111	111	111	111
Central Ohio (\$50)...	110 1/4	111	111	111	111	111
1st mortgage...	110 1/4	111	111	111	111	111
Marietta & Cincinnati...	110 1/4	111	111	111	111	111
1st mortgage, 7 1/2...	110 1/4	111	111	111	111	111
2d mortgage, 7 1/2...	110 1/4	111	111	111	111	111
3d mortgage, 8 1/2...	110 1/4	111	111	111	111	111
Northern Cen. (\$50)...	110 1/4	111	111	111	111	111
2d mort., 6 1/2 1885...	110 1/4	111	111	111	111	111
3d mort., 6 1/2, 1900...	110 1/4	111	111	111	111	111
6 1/2, 1900, gold...	110 1/4	111	111	111	111	111
6 1/2, 1904, gold...	110 1/4	111	111	111	111	111
Pitts. & Connellsv. 7 1/2...	110 1/4	111	111	111	111	111
Virginia 6 1/2, Consol...	110 1/4	111	111	111	111	111
Consol. coupons...	110 1/4	111	111	111	111	111
10 40 bonds...	110 1/4	111	111	111	111	111
Def'd Certificates...	110 1/4	111	111	111	111	111
Western Maryland...	110 1/4	111	111	111	111	111
1st M., end. by Balt...	110 1/4	111	111	111	111	111
2d M., do...	110 1/4	111	111	111	111	111
3d M., do...	110 1/4	111	111	111	111	111
1st M., unendors'd...	110 1/4	111	111	111	111	111
2d M., end. WashCo...	110 1/4	111	111	111	111	111
2d M., preferred...	110 1/4	111	111	111	111	111
City Passenger R.R.	110 1/4	111	111	111	111	111

London Stock Exchange.

Closing Prices

	July 14.	July 21.
Baltimore & Ohio 5 1/2, 1927...	108	108
Central of N. J., \$100 shares...	93	93
Do. consol. mort...	112	112
Do. Income Bonds...	88	90
Central Pacific of Cal., \$100 shs. 96 1/4	97 1/4	97 1/4
Do. 1st mort. 6 1/2, 1895-98...	118	117
Do. 2d mort. 6 1/2, 1895-98...	118	117
Do. 3d mort. 6 1/2, 1895-98...	118	117
Do. 4th mort. 6 1/2, 1895-98...	118	117
Do. 5th mort. 6 1/2, 1895-98...	118	117
Do. 6th mort. 6 1/2, 1895-98...	118	117
Do. 7th mort. 6 1/2, 1895-98...	118	117
Do. 8th mort. 6 1/2, 1895-98...	118	117
Do. 9th mort. 6 1/2, 1895-98...	118	117
Do. 10th mort. 6 1/2, 1895-98...	118	117
Do. 11th mort. 6 1/2, 1895-98...	118	117
Do. 12th mort. 6 1/2, 1895-98...	118	117
Do. 13th mort. 6 1/2, 1895-98...	118	117
Do. 14th mort. 6 1/2, 1895-98...	118	117
Do. 15th mort. 6 1/2, 1895-98...	118	117
Do. 16th mort. 6 1/2, 1895-98...	118	117
Do. 17th mort. 6 1/2, 1895-98...	118	117
Do. 18th mort. 6 1/2, 1895-98...	118	117
Do. 19th mort. 6 1/2, 1895-98...	118	117
Do. 20th mort. 6 1/2, 1895-98...	118	117
Do. 21st mort. 6 1/2, 1895-98...	118	117
Do. 22nd mort. 6 1/2, 1895-98...	118	117
Do. 23rd mort. 6 1/2, 1895-98...	118	117
Do. 24th mort. 6 1/2, 1895-98...	118	117
Do. 25th mort. 6 1/2, 1895-98...	118	117
Do. 26th mort. 6 1/2, 1895-98...	118	117
Do. 27th mort. 6 1/2, 1895-98...	118	117
Do. 28th mort. 6 1/2, 1895-98...	118	117
Do. 29th mort. 6 1/2, 1895-98...	118	117
Do. 30th mort. 6 1/2, 1895-98...	118	117
Do. 31st mort. 6 1/2, 1895-98...	118	117
Do. 32nd mort. 6 1/2, 1895-98...	118	117
Do. 33rd mort. 6 1/2, 1895-98...	118	117
Do. 34th mort. 6 1/2, 1895-98...	118	117
Do. 35th mort. 6 1/2, 1895-98...	118	117
Do. 36th mort. 6 1/2, 1895-98...	118	117
Do. 37th mort. 6 1/2, 1895-98...	118	117
Do. 38th mort. 6 1/2, 1895-98...	118	117
Do. 39th mort. 6 1/2, 1895-98...	118	117
Do. 40th mort. 6 1/2, 1895-98...	118	117
Do. 41st mort. 6 1/2, 1895-98...	118	117
Do. 42nd mort. 6 1/2, 1895-98...	118	117
Do. 43rd mort. 6 1/2, 1895-98...	118	117
Do. 44th mort. 6 1/2, 1895-98...	118	117
Do. 45th mort. 6 1/2, 1895-98...	118	117
Do. 46th mort. 6 1/2, 1895-98...	118	117
Do. 47th mort. 6 1/2, 1895-98...	118	117
Do. 48th mort. 6 1/2, 1895-98...	118	117
Do. 49th mort. 6 1/2, 1895-98...	118	117
Do. 50th mort. 6 1/2, 1895-98...	118	117
Do. 51st mort. 6 1/2, 1895-98...	118	117
Do. 52nd mort. 6 1/2, 1895-98...	118	117
Do. 53rd mort. 6 1/2, 1895-98...	118	117
Do. 54th mort. 6 1/2, 1895-98...	118	117
Do. 55th mort. 6 1/2, 1895-98...	118	117
Do. 56th mort. 6 1/2, 1895-98...	118	117
Do. 57th mort. 6 1/2, 1895-98...	118	117
Do. 58th mort. 6 1/2, 1895-98...	118	117
Do. 59th mort. 6 1/2, 1895-98...	118	117
Do. 60th mort. 6 1/2, 1895-98...	118	117
Do. 61st mort. 6 1/2, 1895-98...	118	117
Do. 62nd mort. 6 1/2, 1895-98...	118	117
Do. 63rd mort. 6 1/2, 1895-98...	118	117
Do. 64th mort. 6 1/2, 1895-98...	118	117
Do. 65th mort. 6 1/2, 1895-98...	118	117
Do. 66th mort. 6 1/2, 1895-98...	118	117
Do. 67th mort. 6 1/2, 1895-98...	118	117
Do. 68th mort. 6 1/2, 1895-98...	118	117
Do. 69th mort. 6 1/2, 1895-98...	118	117
Do. 70th mort. 6 1/2, 1895-98...	118	117
Do. 71st mort. 6 1/2, 1895-98...	118	117
Do. 72nd mort. 6 1/2, 1895-98...	118	117
Do. 73rd mort. 6 1/2, 1895-98...	118	117
Do. 74th mort. 6 1/2, 1895-98...	118	117
Do. 75th mort. 6 1/2, 1895-98...	118	117
Do. 76th mort. 6 1/2, 1895-98...	118	117
Do. 77th mort. 6 1/2, 1895-98...	118	117
Do. 78th mort. 6 1/2, 1895-98...	118	117
Do. 79th mort. 6 1/2, 1895-98...	118	117
Do. 80th mort. 6 1/2, 1895-98...	118	117
Do. 81st mort. 6 1/2, 1895-98...	118	117
Do. 82nd mort. 6 1/2, 1895-98...	118	117
Do. 83rd mort. 6 1/2, 1895-98...	118	117
Do. 84th mort. 6 1/2, 1895-98...	118	117
Do. 85th mort. 6 1/2, 1895-98...	118	117
Do. 86th mort. 6 1/2, 1895-98...	118	117
Do. 87th mort. 6 1/2, 1895-98...	118	117
Do. 88th mort. 6 1/2, 1895-98...	118	117
Do. 89th mort. 6 1/2, 1895-98...	118	117
Do. 90th mort. 6 1/2, 1895-98...	118	117
Do. 91st mort. 6 1/2, 1895-98...	118	117
Do. 92nd mort. 6 1/2, 1895-98...	118	117
Do. 93rd mort. 6 1/2, 1895-98...	118	117
Do. 94th mort. 6 1/2, 1895-98...	118	117
Do. 95th mort. 6 1/2, 1895-98...	118	117
Do. 96th mort. 6 1/2, 1895-98...	118	117
Do. 97th mort. 6 1/2, 1895-98...	118	117
Do. 98th mort. 6 1/2, 1895-98...	118	117
Do. 99th mort. 6 1/2, 1895-98...	118	117
Do. 100th mort. 6 1/2, 1895-98...	118	117

AMERICAN RAILROAD JOURNAL.

Financial and Commercial Review.

THURSDAY EVENING, August 3, 1882.

The quotation for call loans on stocks in the forenoon was 3@3 1/2 per cent, and on United States bonds 2@2 1/2 per cent. In the afternoon the rate on stocks remained the same, but in the last hour fell to 2@2 1/2 per cent.

The posted rates for prime bankers' sterling were 4.86 and 4.89. The actual rates were 4.85@4.85 1/2 and 4.88 1/2 @4.88 1/2, with cables 4.89@4.89 1/2 and prime commercial bills 4.83@4.84. The actual rates for Continental bills are as follows: France, 5.19 1/2 and 5.15, Marks, 94 1/2@94 1/2, and 95 1/2@95 1/2, and Guilders, 40 1/2 and 40 1/2.

The following analysis of the public debt statement for July was prepared by John M. Carson, Clerk of the Committee on Ways and Means. The new fiscal year opens with a reduction in the public debt for the first month of nearly \$14,000,000, which is the largest reduction ever made for July in previous years and nearly \$4,000,000 in excess of the reduction made for July, 1881. This is attributable first to a large increase in receipts from customs compared with last year, and to a reduction in the interest charge. The agitation in Congress touching reduction of taxes on tobacco undoubtedly affected the revenue, but did not affect it to that extent as to cause any material falling off in the receipts from that source for the month, as will be seen by reference to the

table of receipts for the month given below. The loan of July and August, 1861, has disappeared from the debt statement. This was the first loan authorized by the Government on account of the rebellion. The amount authorized to be issued was \$250,000,000, but the amount actually issued was \$189,300,000. The loan of 1861, which is now being called for redemption, amounted in the aggregate to \$75,000,000. This amount has been reduced to less than \$48,000,000, and of this \$31,000,000 are called, a call for \$15,000,000 maturing August 1. This loan will be entirely redeemed by December 1. The available cash balance is nearly \$139,500,000, a decrease of about \$1,000,000 compared with July 1. The standard silver dollars in the Treasury now number nearly \$89,000,000, against which there are outstanding silver certificates amounting to \$54,758,000, thus showing that the Treasury is absolute owner of \$34,000,000 of the silver dollars now on hand. Compared with July 1 this is an increase of nearly \$1,500,000. In gold coin and gold bullion there has been a decrease of \$3,500,000 during the month. Other items of the Treasurer's statements of liabilities and assets are without material change since last month. Compared with July of last year the month just closed shows an increase in receipts of over \$3,000,000, the greater part of this increase arising from customs. It will be observed that receipts from internal revenue fell off only a few thousand dollars. The receipts for July, 1882, were from the following sources: Customs, \$19,950,637; internal revenue, \$12,255,167; miscellaneous, \$5,516,863—total, \$37,722,667. And for July, 1881: from customs, \$17,541,188; internal revenue, \$12,300,633; miscellaneous, \$4,780,669—total, \$34,622,490. The ordinary expenditures were less than \$20,000,000 for July, and about \$500,000 less than for July, 1881.

At a meeting of the stockholders of the Eastern Shore Railroad Company, held at Princess Anne, Md., on the 1st inst., the act of Assembly authorizing the issue of \$500,000 in new mortgage bonds was unanimously accepted. Interest on the same was fixed at 5 per cent, and Samuel M. Felton, J. Taylor Gause, and Daniel Cummins were selected as trustees of the new loan, \$400,000 of which is to be expended in redeeming outstanding bonds. The balance will be used in improving the road and equipment.

At the close of business on the 1st inst. the total conversions of Hartford and Erie bonds into stock amounted to \$16,268,000, which leaves \$3,732,000 of bonds outstanding.

In the settlement of the Lewis will case, which has been partially effected under a special act of Congress, one-fourth of the estate is to be divided among the heirs and \$900,000 is, under the decree of the Circuit Court of the United States for New Jersey, to be applied to the reduction of the National debt.

The capital of the Brooklyn (Ohio) Street Railroad Company has been increased from \$30,000 to \$60,000.

The estimated earnings of the Chesapeake and Ohio Railway Company for the 3d week in July, 1882, were \$72,871.82, against \$50,791.66 for the 3d week in July, 1881, an increase of \$22,080.16. The increase for three weeks in July was \$63,574.42.

The House joint resolution authorizing the issue of two per cent bonds has been reported adversely from the Senate Finance Committee.

The lands thus far sold by the St. Paul and Duluth Railroad Company have averaged \$8 per acre, and there remains unsold 1,267,697 acres.

John E. Johnson, of the banking-house of Brown Brothers & Co., has been admitted to membership in the New York Stock Exchange, having purchased the seat of John A. Buckingham. Brown Brothers & Co. have not hitherto had a representative in 'he Exchange.

The Indianapolis and Cincinnati Railroad was sold on the 28th ult., and purchased by E. B. Thomas for the Cleveland, Columbus, Cincinnati and Indianapolis Railway Company for \$1,396,000. The sale was made subject to a first mortgage indebtedness of \$2,000,000, on which there is an accrued interest of \$131,110, and probably miscellaneous claims aggregating \$1,000,000. It is, however, expected that at least one-half of the claims will not be allowed to come in ahead of the second mortgages, so that the real indebtedness is estimated at \$2,631,110, adding to which \$1,396,000, the price paid, gives a total amount of \$4,027,110. According to the decree, the taxes, and such other claims as may be preferred by the courts, will be paid out of the purchase money, and the residue will be used as a dividend on the second mortgage bonds.

The second mortgage bondholders gave notice of an attempt to prevent the confirmation of the sale, but Mr. Thomas does not think it will be successful. He thinks the property brought a fair price. The entire value of the property represented in the bid is nearly \$12,000,000.

Four installments on the stock of the Phoenixville and Westchester Railroad Company were called at Philadelphia on the 1st inst., making in all 50 per cent that has now been called. The road will soon be put under contract.

A statement is published of the canal business of Buffalo showing that the amount of tolls collected during July, 1882, was \$27,836.94, against \$55,541.92 during July, 1881, a decrease of \$27,704.98; and from the opening of the canal to August 1, 1882, \$127,955.64, against \$150,151.52 for the corresponding time in 1881, a decrease of \$22,195.88. The number of boats cleared in July, 1882, was 745; in July, 1881, 1,101; a decrease of 356. Number cleared from commencement to August 1, this year, 2,802; do. last year, 2,811; a decrease of 9.

The annual report of the Atlanta and West Point Railroad Company shows receipts of \$430,009.51 and operating expenses of \$254,515.22; net earnings, \$175,494.29, which is \$9,017.17 per mile. The surplus above interest (\$75,234.15) and fixed dividends (\$80,093) was \$20,167.14. The passenger receipts increased \$49,000, mainly on account of the Atlanta Cotton Exposition.

L. V. F. Randolph, Treasurer of the Illinois Central Railroad Company, gives notice that he will pay a semi-annual dividend of 3 1/2 per cent on the 1st of September next to shareholders of record on the 12th inst., after which, and until the 5th of September, the transfer-books will be closed.

By referring to the "Statement of the Public Debt" issued on the 1st inst., it will be seen that the total debt of the United States on the 31st of July amounted to \$1,916,152,464.72, less cash in the Treasury \$241,098,013.52, leaving net \$1,675,054,451.20. Since the 1st of July the reduction of the debt is \$13,860,027.52. Of the bonded debt \$250,000,000 bears 4 1/2 per cent interest, \$739,350,500 bears 4 per cent, \$449,311,000 bears 3 1/2 per cent, and \$14,000,000 bears 3 per cent. Interest has ceased on \$13,909,715, and upon \$438,654,331, being in the shape of certificates of deposit, legal tenders, etc., there is no interest. In addition to the above there are \$64,623,512 6 per cent bonds issued to Pacific Railroad Companies, and known as currency 6s.

The amount of United States circulation outstanding is \$346,681,016 legal tenders; \$59,695 old demand notes; \$74,725 one and two year notes; \$220,360 compound interest notes, and \$15,422,403.77 fractional currency; total, \$362,458,199.77. The amount of national bank circulation outstanding is \$357,976,083, showing an increase in July of \$105,893, and an increase since 1st August, 1881, of \$1,739,145. The amount of lawful money held in the treasury to redeem the notes of insolvent and liquidating banks and banks retiring circulation is \$38,650,477. Increase in the past month \$611,063, and in the year \$5,212,145.

The following quotation of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Atlantic and Pacific 1st, 99 1/4; do. inc., 33 1/4; Am. Dock and Imp. 58, 94 1/4; Boston and New York Air Line pref., 77; Chicago, St. Paul, Minneapolis and Omaha, 52; do. pref., 110 1/4; do. consol., 105 1/4; Cedar Falls and Minnesota, 27; Chesapeake and Ohio 1st, Series A, 106; do. cur. 6s, 54 1/4; Chicago, Milwaukee and St. Paul, Chicago and Pacific West div. 1st, 93 1/4; do. Southern Minn. div. 1st, 108; Chicago and Northwestern S. F. 58, 100 1/4; Cairo and Fulton 1st, 108 1/4; Chicago, Burlington and Quincy 8s, 101 1/4; Columbia and Greenville 2d, 88 1/4; Chicago and Eastern Illinois 1st, 100; Col. and Ind. Cent. inc., 53; Dubuque and Sioux City, 95; Denver and Rio Grande, 63; do. 1st, 115 1/4; do. consol., 102; Denver, South Park and Pacific 1st, 101 1/4; East Tenn., Va. and Ga., 11 1/4; do. pref. 19 1/4; do. inc., 48 1/4; do. 5s, 77; Evansville and Terre Haute, 77 1/4; 1st, 96; Elizabethtown, Lexington and Big Sandy 6s, 96; Fort Worth and Denver 1st, 98 1/4; Green Bay, Winona and St. Paul, 12 1/4; do. inc., 28; Gulf, Colorado and Santa Fe 1st, 106 1/4; Houston and Texas Central 1st, Western div., 112; Indianapolis, Decatur and Springfield 1st, 100; Indiana, Bloomington and Western, 46 1/4; do. Eastern div. 6s, 95; International and Gt. Northern 1st, 105; do. coup. 6s, 88; Jefferson 1st, 106; Kentucky Central 6s,

107½; Keokuk and Des Moines 1st, 106½; Kansas Pacific 1st consol., 104½; Louisville and Nashville gen'l mort. 68, 96; do. 2d, 101; Lafayette, Bloomington and Muncie 1st, 102; Long Island, 57½; Lake Erie and Western, 42½; do. 1st, 106; do. inc. 58; do. Sandusky div. inc., 50½; Louisville, New Albany and Chicago, 73; Lehigh and Wilkesbarre inc., 85; Manhattan Beach, 20; Minn. and St. Louis, 33½; do. pref., 69; do. Pacific ext. 1st, 101½; do. Southwest ext. 1st, 110½; Mobile and Ohio, 22½; do. 1st, 111; Missouri, Kansas and Texas, 41½; do. gen'l mort. 68, 87; do. consol. 78, 107; do. 2d, 69; Missouri Pacific, 105½; do. 1st consol., 101½; do. 3d, 111; Milwaukee, Lake Shore and Western, 54½; do. 1st, 101½; do. inc., 76½; Memphis and Charleston, 55; Michigan Southern, S. F., 107½; New York, Chicago and St. Louis, 16½; do. pref., 36½; do. 1st, 94; Nashville, Chattanooga and St. Louis, 65½; do. 1st, 113½; New York, Ontario and Western, 29½; Norfolk and Western, 20; do. pref., 56½; Northern Pacific 1st reg., 103½; do. coupon, 104; New Orleans Pacific 1st, 93½; New York City and Northern gen'l mort., 56½; Ohio Central, 19; do. 1st, 95; Ohio Southern, 19½; do. 1st, 86½; do. inc., 31½; Oregon Railway and Nav., 150½; do. 1st, 107; Oregon Transportation, 89; Oregon Short Line 68, 105; Peoria, Decatur and Evansville, 38½; do. 1st, 106; do. inc., 80; Pennsylvania Co. 4½, reg., 98½; do. coupon, 96½; Rochester and Pittsburgh 27½; do. 1st, 108; do. inc., 47; Richmond and Alleghany, 24; do. 1st, 89; Richmond and Danville, 114½; do. 1st, 100; do. debent., 79; Richmond, Danville and West Point, 61½; St. Paul, Minneapolis and Manitoba, 131½; do. 1st, 109; do. 2d, 113; do. Dakota ext. 1st, 108½; St. Paul and Duluth, 30; do. pref., 85; South Carolina, 27; do. 1st, 100; Southern Pacific of California 1st, 106; South Pacific of Missouri 1st, 110; St. Louis, Alton and Terra Haute dividend bonds, 50; St. Louis, Iron Mountain and Southern 58, 82; St. Louis, Kansas City and Northern, Omaha div. 1st, 111½; Scioto Valley 1st, 95; St. Louis and San Francisco 2d, Class A, 98½; Texas and Pacific, 53½; do. inc. Land Grant, 70; do. Rio Grande div. 1st, 88½; Toledo, Delphos and Burlington, 18; do. inc., 30; Texas and St. Louis, 30; Texas Central 1st, 107½; Utah Southern gen'l mort. 78, 105½; do. ext. 1st, 113; Virginia Midland, 56½; do. inc., 71; Wabash, St. Louis and Pacific, gen'l mort. 68, 85½; do. Chicago div. 1st, 85; Winona and St. Peter 1st, 106; Arkansas 78, L. R., P. B. and N. O., 22; Alabama, Class A, 79½; North Carolina 68, special tax; 3d class, 8; South Carolina 68, non-fundable, 9; Tennessee 68, 57½; American District Telegraph, 56; Colorado Coal and Iron, 48½; do. 68, 90½; Cameron Coal, 35½ Standard Mining Co., 15½.

Boston.—Atchison, Topeka and Santa Fe plain 58, 88; do. mort. 58, 97; Atlantic and Pacific blocks, 110½; do. inc., 32; Boston and Albany 78, 125; Boston and Lowell 78, 120½; Boston Land, 8½; Boston Water Power, 4½; Boston, Clinton, Fitchburg and New Bedford, 64½; do. pref., 131; California Southern, 25; Central of Iowa, 28; Chicago and West Michigan, 69; Connoton Valley, 8½; do. 58, 68½; Connecticut River pref., 154; Chicago, Burlington and Quincy 48, Denver ext., 85; Cincinnati, Sandusky and Cleveland 78, 104; Connecticut and Passumpsic River pref., 92; Cambridge City 68, 118; Chicago, Milwaukee and St. Paul, Dubuque div. 58, 103½; Detroit, Lansing and Northern, 75; do. 78, 118; Dubuque and Sioux City 78, 107; Flint and Pere Marquette, 24; do. pref., 96; Iowa Falls and Sioux City, 91½; Kansas City, St. Joseph and Council Bluffs 78, 115½; Kansas City, Fort Scott and Gulf 78, 109½; Kansas City, Lawrence and Southern 58, 104½; Little Rock and Fort Smith, 57; do. 78, 107½; Marquette, Houghton and Ontonagon, 77½; Massachusetts Central, 5½; do. 68, 43½; Mexican Central, 30; do. blocks No. 2, 121½; do. No. 3, 109½; do. 78, 86½; do. inc., 29; Maine Central, 65; New York and New England 68, 105½; Ogdenburg and Lake Champlain 68, 95; Oregon Short Line subs., 120; do. 68, 103; Portsmouth, Gt. Falls and Conway, 30; Rutland pref., 26; do. 68, 100; do. 58, 70; Sonora 78, 107½; Summit Branch, 14½; Toledo, Delphos and Burlington trust cert., 112; do. Branch inc., 20; Toledo, Cincinnati and St. Louis, 8½; do. 68, 68; do. inc., 28; do. Southeast div. 68, 69½; do. Dayton div. 68, 70; do. Iron Mountain inc., 23; Wisconsin Central, 18; Atlantic Mining Company, 15½; Franklin, 14½; Harshaw, 2½; Huron, 2½; National, 2½; Oceola, 32; Penabie, 11½; Silver Islet, 14½; Sullivan, 17½.

Philadelphia.—American Steamship Company 68, 105½; Central Transp., 34½; Camden and Burlington County

Railroad, 30; Huntington and Broad Top Mt. consol. 58, 90; do. 1st, 117; Lehigh Valley An. bonds, 115; Norfolk and Western pref. 57½; Nesquehoning Valley, 55½; Oil Creek 1st, 106; Oregon Steam Nav., 44; Pennsylvania R. R. consol. mort. 58, 107½; Philadelphia 48, 1897, 112; do. 48, 1894, 109; do. 48, 1884, 102; do. 48, 1904, 113; do. 68, 1883, 101½; do. 68, 1895, 125½; do. 68, 1899, 130; Perkiomen 58, 106; Philadelphia, Wilmington and Baltimore 48, 95½; Pennsylvania Canal 68, 93; Philadelphia and Reading scrip, 100; Philadelphia and Reading Coal and Iron mort. 78, 83; Sunbury, Hazleton and Wilkesbarre 2d, 25; Texas and Pacific, 55½; do. 1st, 107½; do. consol. mort. 68, 96; Rio Grande div. 1st, 88½; West Jersey R. R., 46; West Chester and Philadelphia 78, 119; Western Pennsylvania 68, A. and O., 112; do. J and J., 108. The latest quotations are: City 68, 108 @120; do. free of tax, 127@133; do. 48, new, 108@113; Pennsylvania State 58, new loan, 116½@117; do. 48, old, 108@112; do. 48, new, 112@116; Philadelphia and Reading Railroad, 30½@31; do. consol. mort. 78, reg. 124@125; do. gen'l mort. 68, coupon, 96@96½; do. 78, 1893, 119@—; do. new conv., 76@76½; United New Jersey R. R. and Canal, 188@188½; Buffalo, Pittsburg and Western, 21½@21½; Pittsburg, Titusville and Buffalo 78, 95@98; Camden and Amboy mort. 68, 1889, 112½@113½; Pennsylvania R. R., 62@62½; do. general mort. 68, coupon, 123½@124½; do. reg., 122½@123½; do. consol. mort. 68, reg., 121@121½; Little Schuylkill R. R., 56½@57; Schuylkill Navigation, pref., 13@14; do. 68, 1882, 90@92; Elmira and Williamsport pref., 58@60; do. 58, 100½@101; Lehigh Coal and Navigation, 43½@43½; do. 68, 1884, 103½@104; do. R. R. loan, 116@116½; do. Gold Loan, 111½@112½; do. consol. 78, 116½@117; Northern Pacific, 50@50½; do. pref., 91@91½; North Pennsylvania, 64½@65; do. 68, 105@107; do. 78, 123@124; do. 78, General mort. reg., 121½@122½; Philadelphia and Erie, 16@18; do. 78, 114@115; do. 58, 104@105; Minehill, 61@62; Catawissa 24@24½; do. pref., 54@55; do. new pref., 54@54½; do. 78, 1900, 120@—; Lehigh Valley, 63@63½; do. 68, coupon, 123@125; do. reg., 123@124; do. 78, 134@137; do. consol. mort. 120@121; Fifth and Sixth streets (horse), 160@161; Second and Third, 108@112; Thirteenth and Fifteenth, 65@75; Spruce and Pine, 40@46; Green and Coates, 80@90; Chestnut and Walnut, 90@93; Germantown, 69½@70; Union, 110@115; West Philadelphia, 106@115; People's 14@15; Continental, 100@102.

Baltimore.—Atlantic Coal, 120; Atlanta and Charlotte, 76; do. 1st, 109½; Baltimore City 68, 1890, 117½; do. 58, 1916, 125½; Charlotte, Columbia and Augusta, 53½; Canton Co. 68, 102½; Columbia and Greenville 2d, 83; Georgia Creek, 95; Maryland Defense 68, 106; Marietta and Cincinnati 1st Trust certificates, 128; do. 2d do. 101½; do. 3d do., 57; Ohio and Mississippi, Springfield div. 68, 120½; Richmond and Danville gold bonds, 99½; Virginia Midland, old, 100; do. 1st pref., 110; do. 3d mort., 93; do. 5th mort., 97; do. inc., 75; Virginia 10-40 coupons, 65½; Virginia Peeters, 34; Wilmington, Columbia and Augusta, 109. The latest quotations are: Atlanta and Charlotte, 75½@76½; do. 1st, 109@109½; Baltimore and Ohio, 194@195; do. 68, 1885, 107½@—; Baltimore City 68, 1884, 103½@—; do. 68, 1886, 109@—; do. 68, 1890, 117@118; do. 68, 1893, 118½@—; do. 58, 1916, —@125; Columbia and Greenville 1st, 102@103; Canton Co. 68, 102½@103; Central Ohio 1st, 110½@111; Marietta and Cincinnati 1st, 128@128½; do. 2d, 101½@101½; do. 3d, 57@57½; Norfolk and Western pref., 55½@58; Northern Central, 49½@49½; do. 68, 1900, 117@117½; do. 68, 1900, gold, 116½@117; do. 58, 1926, 98½@99; Ohio and Mississippi, Springfield div. 1st, 120½@121; Richmond and Danville, 111@—; Union Canal 68, 118@—; Virginia Midland 5th mort., 96½@—; do. inc., 73@75; Virginia consols, 60½@61; do. consol. coupons, 60@62; Virginia 10-40s, 43½@43½; do. 10-40 coupons, 65@65½.

HENRY ERSKINE, pleading before Lord Thurlow, had to speak of a certain curator, and gave the Scotch pronunciation of the word, with the accent on the first syllable. "Pardon me, Sir," said Thurlow; "we pronounce the word eu-ra-tor in England, following the analogy of the Latin language, in which the penultimate syllable is long." "I thank you, my Lord," replied Erskine, "and I bow at once to the authority of a Se-na-tor so learned, and an o-ra-tor so eloquent as your Lordship."

Pennsylvania Railroad.

THE business of the Pennsylvania Railroad Company for the month of June, 1882, on its lines east of Pittsburgh and Erie, as officially reported, compares with the same month of 1881 and 1880 as follows:—

	1880.	1881.	1882.
Gross earnings.....	\$3,291,476	\$3,807,437	\$4,093,756
Operating expenses.....	2,279,229	2,318,894	2,559,423

Net earnings..... \$1,012,247 \$1,488,543 \$1,534,333

The net earnings of the leased lines of the company, west of Pittsburgh and Erie, for the six months ended June 30, 1882, show a deficiency in meeting rental of \$120,657 against a surplus of \$1,428,864 for the same period of 1881. The following statement shows the comparative results of the whole system's business for six months—January 1 to June 30—for three years:—

	1880.	1881.	1882.
Gross earnings.....	\$19,504,071	\$21,553,839	\$22,650,847
Operating expenses.....	11,409,862	12,556,885	14,460,725

Net earnings of Eastern lines..... \$8,094,209 \$8,996,954 \$8,190,122

Add—Profits of leased lines west of Pittsburgh and Erie..... 1,311,136 1,524,864

Deduct—Loss by leased lines west of Pittsburgh and Erie.....

Total net to Pennsylvania Railroad..... \$9,405,345 \$10,521,818 \$8,069,465

Decrease in net earnings for six months from 1881..... 2,452,352

Decrease in net earnings for six months from 1880..... 1,335,880

Immense Telescope for Russia.

THE Russian Observatory at Poulkovo will shortly be in possession of a gigantic telescope. For a long time this observatory, constructed in 1839 by order of the Czar Nicholas, possessed the most powerful instruments in the world, but of late years the scientific progress which has been made in England, France and the United States has put the Poulkovo Observatory in the shade. The University of Virginia, for instance, has now the enormous McCormick telescope, the objective of which is 26½ inches in diameter, and 33 feet long, while the Naval Observatory at Washington has one of the same calibre, and Mr. Deck, a wealthy Californian, is about to place a still greater telescope on Mount Hamilton, near San Jose. Four years ago the Russian Government accordingly determined to construct a new instrument which, both in respect to its mechanism and optic power, would surpass any existing telescope. The astronomer, Otto Sturwe, was commissioned to superintend the work, the execution of which was intrusted to Alvin Clark & Co., of Cambridge, Mass. The glasses, consisting of an amalgam of flint and crown glass, have been in hand for nearly a year, and by the month of October they will be ready for use. The total length of the Poulkovo telescope, says the London Telegraph, will be 45 feet, and the diameter of the glass 30 inches, exclusive of the mounting. The telescope will be placed in a meadow to the southwest of the principle building of the Poulkovo Observatory, and it will stand upon a movable iron turret which will itself rest on rails. This telescope will be so powerful that the moon will be brought to an apparent distance of only a hundred miles from the earth.

RAILROAD AND CANAL DIVIDEND STATEMENT.

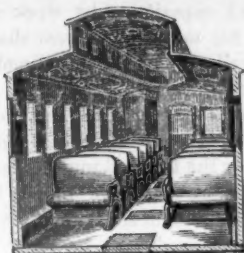
Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus (*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*.....100	2,500,000	semi-an	July '82 2	Little Miami.....50	4,637,300	q'arterly	June '82 2	Ware River*.....100	750,000	semi-an.	July '82 3 1/2
Ashuelot.....100	210,000	q'arterly	Oct. '81 3 1/2	Little Rock & Ft. S.....100	4,096,135	.....	July '81 10 1/2	Warren (N. J.).....100	1,800,000	semi-an.	Apl. '82 3 1/2
Atch., Top. and S. Fe.....100	54,000,000	q'arterly	Aug. '82 1 1/2	Little Schuylkill*.....50	2,646,100	semi-an.	July '82 3 1/2	Warwick Valley.....100	340,000	semi-an.	July '82 2 1/2
Atlanta and W. Point.....100	1,232,200	semi-an	Jan. '82 6	Louisville & Nashv.....100	19,130,913	semi-an.	Feb. '82 3	Westchester & Phil. pref.....100	821,300	semi-an.	July '82 2
Atlantic and St. Law*.....100	5,840,000	semi-an	Mar. '82 3	Lowell & Andover.....100	500,000	semi-an.	Jan. '82 3 1/2	West Jersey.....100	1,359,750	semi-an.	July '82 3 1/2
Augusta and Savan*.....100	1,022,900	semi-an	June '81 3 1/2	Lykens Valley.....100	600,000	q'arterly	Oct. '81 2 1/2	Wilmington & Weld'n.....100	1,456,200	semi-an.	July '82 3
Avon, Genesee & M'K*.....100	225,000	semi-an	July '81 3	Manchester & Law.....100	1,000,000	semi-an.	May '82 5	Wil., Col., & Aug.....100	960,000	semi-an.	July '82 3
Baltimore and Ohio.....100	14,799,566	semi-an	May '82 5	Manhattan.....100	13,000,000	q'arterly	July '82 1 1/2	Winchester & Poto'c*.....100	180,000	semi-an.	July '82 3
" pref.....100	5,000,000	semi-an	July '82 3	" 1st pref.....100	6,500,000	q'arterly	July '82 1 1/2	Winchester & Strasb*.....100	74,700	semi-an.	July '82 3
Washington Br.....100	1,050,000	semi-an	Apl. '82 5	" 2d pref.....100	6,500,000	q'arterly	July '82 1 1/2	Worcester & Nashua. 75	1,789,800	semi-an.	July '82 1 1/2
Berkshire*.....100	600,000	q'arterly	Apl. '82 1 1/2	Marietta & Cincinnati 50	1,386,350	.....	.....		
Boston and Albany.....100	20,000,000	q'arterly	June '82 2	" 1st pref 50	8,105,600	semi-an.	Sep. '66 38				
Bos. & N. Y. Air Line pf.....100	2,795,227	q'arterly	June '82 1	" 2d pref 50	4,440,000	semi-an.	Sep. '66 38				
Bos., Cl. F. & N. B. pref.....100	1,750,100	.....	Apl. '82 3 1/2	Marq. Hout. & Ont. pf.....100	2,259,085	.....	Aug. '82 4	Albany City.....100	200,000	annual	.....'80 5 1/2
Bos., Con. & Mont. pf.....100	800,000	semi-an	May '82 3	Massachusetts*.....100	400,000	semi-an.	Aug. '82 3	Baltimore City.....25	1,000,000	semi-an.	July '82 3
Boston and Lowell.....500	3,940,000	semi-an	July '82 2	Michigan Central.....100	18,738,204	q'arterly	Aug. '81 1	Balt., Cat. & El. Mills.....100	.....	semi-an.	July '82 2
Boston and Maine.....100	6,921,274	semi-an	May '82 4	Middlesex Central.....100	280,000	semi-an.	Feb. '82 3	Bleeker St. & Ful. F. y.....100	900,000	semi-an.	July '81 1/2
Boston & Providence.....100	4,000,000	semi-an	May '82 4	Mill Creek & Minehill*.....50	323,000	semi-an.	July '82 5	Boston & Chelsea pref.....100	110,000	semi-an.	Apl. '82 3
Attleborough Br.....100	131,700	semi-an	July '82 3 1/2	M. Hill & Schuyl. Hay*.....50	4,022,500	semi-an.	July '82 3 1/2	Broadway (Brooklyn).....100	250,000	q'arterly	Oct. '81 3
Bos., Revere B. & Lynn.....100	419,400	semi-an	July '82 3 1/2	Missouri Pacific.....100	3,022,517	semi-an.	Feb. '80 2 1/2	B'way & 7th Av. (N. Y.).....100	2,100,000	q'arterly	Oct. '81 2
Buffalo, N. Y. & Erie*.....100	950,000	semi-an	June '82 3	Mobile & Montgomery.....100	800,000	annual	Feb. '80 2	B'klyn & Hunter's Pt.....100	400,000	semi-an.	July '79 3
Camden & Atlantic.....50	377,400	q'arterly	Apl. '80 3 1/2	Mont. & Wells River.....100	15,000,000	semi-an.	July '82 3 1/2	Brooklyn City.....100	2,000,000	q'arterly	Dec. '81 3 1/2
" pref.....50	880,650	q'arterly	Apl. '80 3 1/2	Morris and Essex.....50	282,350	semi-an.	July '82 6	Bushwick (Brooklyn).....100	309,000	semi-an.	July '81 2 1/2
Camden & Burl. Co.....100	381,925	semi-an	July '82 3	Mt Carbon & P't Carbon 50	800,000	semi-an.	July '82 4	Cambridge.....100	908,000	q'arterly	Apl. '82 4 1/2
Canada Southern.....100	15,000,000	.....	Feb. '81 2 1/2	Nashua and Lowell.....100	1,305,800	semi-an.	July '82 1 1/2	Cen. Park N. & E. Riv.....100	1,800,000	q'arterly	July '82 2
Cape May & Millville*.....50	447,000	semi-an	June '81 3	Nashua & Rochester.....100	1,827,000	semi-an.	June '81 3	Christoph' & Tenth St.....100	650,000	semi-an.	Aug. '81 2 1/2
Catawissa*.....100	1,159,500	annual	Oct. '81 1 1/2	Nashv. & Decatur.....100	6,670,325	semi-an.	Apl. '82 1 1/2	Citizens' (Phil.).....50	192,500	q'arterly	Jan. '82 2 1/2
" pref.....20	2,000,000	semi-an	May '82 3 1/2	Nash. & Chat. & St. Louis 25	1,300,000	semi-an.	Jan. '82 5	Citizens' (Pbg.).....50	200,000	annual.	.....'80 14 1/2
" new pref.....50	1,000,000	semi-an	May '82 3 1/2	Naugatuck.....100	1,300,000	semi-an.	Mar. '82 3	Coney Island & Bklyn.....100	500,000	semi-an.	Oct. '80 5
Cayuga and Susq*.....50	589,110	semi-an	July '81 4 1/2	Nesquehoning Val'y*.....50	600,000	q'arterly	Oct. '81 —	Continental (Phil.).....50	580,000	semi-an.	July '82 6
Cedar Rapids & Mo. R*.....100	6,850,400	q'arterly	Aug. '82 1 1/2	N. Castle & Beaver Val*.....50	1,500,000	q'arterly	Oct. '81 —	D. Dock, E. B'way & Batico.....100	1,200,000	q'arterly	Nov. '81 4
" pref.....100	769,600	semi-an	Aug. '82 3 1/2	New London North n*.....100	89,428,330	q'arterly	July '82 1 1/2	Eighth Av. (N. Y.).....100	747,000	semi-an.	Nov. '81 6
Central of Georgia.....100	7,500,000	semi-an	June '82 1	N. Y. Cen. & Hud. R.....100	7,950,000	q'arterly	July '82 4	Frankf. & Southw (Ph) 50	600,000	q'arterly	Jan. '82 6
Central of New Jersey.....100	18,563,200	q'arterly	July '76 2 1/2	N. Y. & Harlem.....100	1,500,000	q'arterly	July '82 4	Germantown, (Ph.).....50	572,800	q'arterly	July '82 2 1/2
Central Ohio.....50	2,437,950	semi-an	July '82 3	" pref.....100	1,500,000	annual	Apl. '82 3	Girard College (Ph.).....50	500,000	semi-an.	July '71 3
" pref.....50	411,550	semi-an	July '82 3	N. Y., Lake Erie & West.....100	77,083,900	.....	Jan. '82 6	Grand St. & Newton.....100	170,091	semi-an.	July '81 2 1/2
Central Pacific.....100	59,275,000	q'arterly	July '81 1 1/2	" pref.....100	81,568,825	semi-an.	Jan. '82 6	Green & Coates St. (Ph) 50	150,000	q'arterly	July '82 3
Chemung.....100	380,000	q'arterly	July '81 1 1/2	N. Y., N. H. & Hart.....100	15,500,000	q'arterly	Aug. '82 2	Heaton, Mantau & F'm 50	209,381	semi-an.	Jan. '75 4
Cheshire preferred.....100	2,155,300	semi-an	Mar. '82 1 1/2	N. Y. Prov. & Boston.....100	3,000,000	q'arterly	Aug. '82 2	Highland.....100	600,000	semi-an.	July '82 4
Chicago and Alton.....100	11,181,741	semi-an	Mar. '82 4	N. Y., Prov. & Boston.....100	3,000,000	q'arterly	Aug. '82 2	Lomb. & South St. (Ph) 25	195,000	semi-an.	Oct. '75 4
" pref.....100	2,245,400	semi-an	Mar. '82 4	Niag. Bridge & Canad*.....100	1,000,000	semi-an.	Sep. '81 3	Lynn and Boston.....100	200,000	semi-an.	May '82 4
Chi., Burl. & Quincy.....100	55,337,455	q'arterly	June '82 2	North Carolina*.....100	1,000,000	semi-an.	Sep. '81 3	Malden and Melrose.....100	165,000	.....	.....
Chi., Iowa & Nebras*.....100	3,916,200	semi-an	July '82 4	" pref.....100	86,000	semi-an.	May '81 4	Metropolitan (Bost.).....50	1,500,000	semi-an.	July '82 4
Chi., Mil. & St. Paul.....100	20,404,261	semi-an	Apl. '82 3 1/2	N. Eastern (S. C.) pref.....100	15,000,000	q'arterly	June '82 1 1/2	Middlesex (Boston).....100	650,000	semi-an.	May '82 3 1/2
" pref.....100	14,401,483	semi-an	Apl. '82 3 1/2	Norfolk & Western pref.....100	4,527,150	q'arterly	May '82 1 1/2	N. Y., Bay Ridge & Jamico.....100	150,000	.....	Oct. '78 7
Chi. & N. Western.....100	14,988,257	semi-an	June '82 3 1/2	Northern Central.....50	6,142,000	semi-an.	July '82 3	Ninth Av. (N. Y.).....100	797,320	.....	.....
" pref.....100	21,525,353	q'arterly	June '82 2	Northern N. Hampsh.....100	3,068,400	semi-an.	June '82 3	Orange & Newark.....100	282,555	.....	.....
Chi., R. I. & Pacific.....100	41,960,000	q'arterly	Aug. '82 1 1/2	Northern N. Jersey*.....100	1,000,000	semi-an.	July '80 2 1/2	People's (Phila.) pref. 25	124,744	.....	July '82 2
Chi. and West Mich.....100	6,151,000	semi-an	Feb. '82 2 1/2	Norwich & Worcester*.....100	2,604,400	semi-an.	July '82 5	Philadelphia City.....50	475,000	semi-an.	July '82 4
Chi., St. P., M. & O. pref.....100	10,300,000	q'arterly	July '82 1 1/2	Ohio.....100	18,500,000	semi-an.	Mar. '75 3 1/2	Phila. and Darby.....20	300,000	semi-an.	July '81 3 1/2
C. Ind., St. L. & Chi.....100	6,000,000	q'arterly	July '82 1 1/2	Ohio and Miss. pref.....100	4,030,000	semi-an.	Mar. '75 3 1/2	Phila. & Grey's Ferry.....50	308,000	semi-an.	Jan. '82 6
Cin., Sand. & Clev. pf.....50	429,037	semi-an	May '82 3	Old Colony.....100	7,333,800	semi-an.	July '82 3 1/2	Pbg. Alleg. & Manches.....300	300,000	q'arterly	Oct. '81 3
Clev. and Mahoning*.....50	3,759,200	semi-an	Nov. '81 3 1/2	Oregon R'way & Nav.....100	6,000,000	q'arterly	Aug. '82 2	Ridge Avenue (Ph.).....50	400,000	semi-an.	Oct. '81 11
Clev. and Pittsburg*.....50	11,244,336	q'arterly	June '82 1 1/2	Oswego & Syracuse.....100	1,320,400	semi-an.	Aug. '81 4 1/2	Second Avenue (N. Y.).....100	1,199,500	semi-an.	July '81 2 1/2
Columbus & Xenia*.....50	1,786,200	q'arterly	June '82 2	Panama.....100	7,000,000	.....	July '82 6 1/2	Second & Third St. (Ph) 50	771,076	q'arterly	Jan. '82 4 1/2
Colum. & Hocking Val.....100	2,500,200	semi-an	Aug. '81 20 1/2	Paterson & Hudson*.....100	630,000	semi-an.	July '82 4	17th & 19th sts (Ph.).....50	250,000	q'arterly	July '81 3
Concord.....50	1,500,000	semi-an	May '82 5	Paterson & Ramapo.....100	248,000	semi-an.	July '82 4	Sixth Avenue (N. Y.).....100	75,000	semi-an.	Oct. '81 5
Concord and Ports*.....100	350,000	semi-an	July '82 3 1/2	Pemb. & Hightst'n*.....50	342,150	semi-an.	Jan. '82 3	Somerville (Boston).....100	113,000	semi-an.	May '82 3
Conn. & Passump. Riv.....100	2,444,400	semi-an	Aug. '82 3	Pennsylvania.....50	77,672,750	semi-an.	May '82 4	South Boston.....50	600,000	semi-an.	July '82 4
Connecticut River.....100	2,100,000	semi-an	July '82 4	Pennsylvania Co.....50	20,000,000	semi-an.	June '81 2 1/2	Third Avenue, N. Y.....2,000,000	q'arterly	Nov. '81 5	
Cumberland Valley.....50	1,292,950	q'arterly	July '82 2 1/2	Peoria & Bureau Val*.....100	1,200,000	semi-an.	Feb. '82 4	13th and 16th sts., Ph 50	334,529	q'arterly	Jan. '82 4
" 1st pref.....50	241,900	q'arterly	Apl. '82 4	Philadelphia & Erie*.....100	7,013,700	semi-an.	.....	23d street, N. Y.....100	600,000	semi-an.	Aug. '81 4
" 2d pref.....50	243,000	semi-an	Apl. '82 4	" pf.....100	2,400,000	semi-an.	Jan. '75 4	Union, Boston.....100	374,300	semi-an.	Jan. '82 4
Danbury & Norwalk.....50	600,000	.....	Apl. '82 1 1/2	Phil. Ger. & Norrist'n*.....50	2,231,900	q'arterly	Jan. '82 3	Union, Phila.....50	1,005,000	semi-an.	Jan. '82 7
Dayton and Mich*.....50	2,402,573	semi-an	Apl. '82 1 1/2	Phil. and Reading.....50	32,726,375	q'arterly	Jan. '76 2 1/2	West Philadelphia.....50	750,000	semi-an.	July '77 10
" pref.....50	1,211,250	q'arterly	July '82 2	" pref.....50	1,551,800	q'arterly	Jan. '76 2 1/2				
Delaware*.....25	1,468,940	semi-an	July '82 3	Phila. and Trenton.....100	1,250,100	q'arterly	July '82 2 1/2				
Del. & Bound Brook*.....100	1,652,000	q'arterly	May '82 1 1/2	Phila., Wil. and Balt.....100	11,585,750	semi-an.	July '82 4	Chesapeake and Dela 50	2,078,038	semi-an.	June '75 2
Del., Lack. & Western 50	26,200,000	q'arterly	July '82 2	Pittab., Ft. W. & Chi*.....100	19,714,285	q'arterly	July '82 1 1/2	Delaware Division.....50	1,633,350	semi-an.	Feb. '82 1
Denver & Rio Grande.....100	29,160,000	q'arterly	Jan. '82 1 1/2	" Special Imp.....100	6,770,900	q'arterly	July '82 1 1/2	Delawa. and Hudson.....100	20,000,000	q'arterly	June '82 1 1/2
Den., South P. & Pac.....100	3,500,000	semi-an	Aug. '80 4	Pittsfield & N. Adams.....100	450,000	semi-an.	July '82 2 1/2	Delaware & Raritan*.....50	5,847,400	q'arterly	July '82 2 1/2
Detroit, Lans. & Nor.....100	1,825,600	semi-an	Aug. '82 3 1/2	Portl., Saco & Portland.....100	1,500,000	semi-an.	July '82 3	Lehigh Coal and Nav 50	11,204,250	q'arterly	June '82 2
" pref.....100	2,503,380	semi-an	Aug. '82 3 1/2	Providence & Worcester.....100	2,000,000	semi-an.	July '82 3	Monongahela Nav.....50	1,004,500	semi-an.	July '82 3
Dubuque & Sioux C'y*.....100	5,000,000	semi-an	Apl. '82 3	Rensselaer & Saratog*.....100	7,000,000	semi-an.	July '82 4	Morris, consolidated.....100	1,025,000	semi-an.	Feb. '81 2
East Pennsylvania*.....50	1,709,550	semi-an	July '82 3	Rhode Island & Mass.....100	100,000	.....	Jan. '81 3	" preferred.....100	1,175,000	semi-an.	Feb. '81 5
East Mahanoy*.....50	392,450	semi-an	July '82 3	Richmond & Danv.....100	3,866,000	q'arterly	May '82 2	Pennsylvania.....50	4,501,200	.....	.....
Eastern (N. H.).....100	492,500	semi-an	June '82 2 1/2	Richmond & Petersb.....100	1,009,300	semi-an.	Jan. '81 3	Schuyl. Nav., com.*.....50	859,100	annual.	Aug. '81 50c
Eel River.....100	3,000,000	q'arterly	June '82 1 1/2	Roch. & Genesee Val*.....100	555,200	semi-an.	July '82 3	" pref.....50	3,200,000	annual.	Aug. '81 1
Elmira, Jef. & Canand*.....100	500,000	annual	Sep. '80 5	Rome, Watert. & Ogd.....100	5,293,900	semi-an.	July '75 1 1/2				
Elmira & Williams*.....100	500,000	semi-an	May '82 1 1/2	Rutland preferred.....100	4,000,000	semi-an.	Sept. '82 1	MISCELLANEOUS.			
" pref.....50	500,000	semi-an	July '82 3 1/2	St. L., Alt. & T. Haute.....100	2,400,000	.....	.....	Adams Express.....100	12,000,000	q'arterly	July '82 2
Erie and Pittsburg*.....50	1,998,400	q'arterly	June '82 1 1/2	" pref.....10							

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
BURL., CEDAR RAP. & NORTHERN:													
1880.....	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881.....	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	232,812	2,259,037
1882.....	252,823	225,631	224,107	178,304	199,278	211,257	.....	.....	.....	.....	.....	.....	.....
CENTRAL PACIFIC:													
1880.....	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881.....	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,859,000	2,059,000	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882.....	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	.....	.....	.....	.....	.....	.....	.....
CHESAPEAKE AND OHIO:													
1880.....	202,335	198,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,009	2,674,308
1881.....	162,540	184,389	228,479	227,343	252,235	241,135	225,096	262,858	247,144	237,393	235,585	203,562	2,702,762
1882.....	210,455	209,708	208,981	267,454	255,939	200,753	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND ALTON:													
1880.....	534,054	497,013	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	606,776	574,695	7,718,198
1881.....	487,890	461,641	529,915	558,190	548,555	635,860	671,466	771,466	768,897	750,359	680,133	635,307	7,553,988
1882.....	579,447	530,480	584,483	561,787	553,412	613,886	.....	.....	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN:													
1880.....	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881.....	1,240,667	963,208	1,178,795	1,474,612	1,879,006	2,306,040	1,993,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,209
1882.....	1,620,336	1,471,945	1,696,568	1,634,819	2,058,133	2,022,700	.....	.....	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY:													
1880.....	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,056	1,773,643	1,834,321	1,862,285	1,934,762	1,837,860	1,552,018	20,454,494
1881.....	1,034,821	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,558	2,173,945	2,262,981	2,031,001	1,816,133	1,905,490	21,324,150
1882.....	1,058,834	1,457,300	1,566,217	1,530,838	1,505,261	.....	.....	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL:													
1880.....	764,298	738,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881.....	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,000	1,645,000	1,590,000	1,569,000	1,855,000	17,025,462
1882.....	1,435,000	1,377,000	1,561,000	1,518,000	1,620,000	1,620,000	1,465,000	.....	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA:													
1880.....	193,827	173,078	259,783	259,208	232,124	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881.....	257,786	158,594	251,648	261,211	350,126	404,502	392,702	385,586	363,685	382,714	380,733	391,950	3,981,296
1882.....	307,498	315,100	405,779	356,558	406,420	363,109	.....	.....	.....	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO:													
1880.....	155,697	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881.....	182,523	171,511	191,005	183,710	191,056	192,299	178,861	229,858	219,977	212,606	194,805	192,623	2,296,916
1882.....	200,042	186,879	208,066	204,269	199,110	195,948	.....	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE:													
1880.....	124,759	126,922	160,883	164,882	193,925	295,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881.....	307,476	317,681	398,493	432,111	514,767	584,230	548,284	606,193	620,643	665,686	566,819	643,417	6,206,812
1882.....	491,914	412,987	535,055	559,917	614,298	537,462	495,797	.....	.....	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH:													
1880.....	176,079	166,065	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,391
1881.....	154,401	122,874	176,356	190,812	172,950	190,740	198,110	215,308	202,567	313,433	201,782	180,376	2,230,966
1882.....	138,284	154,717	168,798	148,913	154,917	155,030	.....	.....	.....	.....	.....	.....	.....
ILLINOIS CENTRAL:													
1880.....	595,212	613,806	613,008	535,732	665,120	681,736	724,095	732,755	806,836	880,211	783,120	673,182	8,304,812
1881.....	631,281	524,499	557,789	662,493	673,259	803,887	720,004	868,407	828,847	815,238	737,218	763,475	8,586,397
1882.....	728,173	689,387	695,371	674,003	674,749	663,746	.....	.....	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN:													
1880.....	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881.....	90,283	83,261	192,085	203,677	200,064	199,846	83,764	117,956	195,307	181,674	160,826	156,697	.....
1882.....	195,824	175,755	206,235	205,934	182,554	186,133	.....	.....	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE:													
1880.....	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881.....	816,960	805,124	947,959	850,862	828,726	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,326,859
1882.....	950,065	960,036	1,073,745	950,007	946,435	1,187,385	.....	.....	.....	.....	.....	.....	.....
MOBILE AND OHIO:													
1880.....	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881.....	224,347	216,768	230,916	163,551	145,803	136,517	135,548	159,348	209,044	252,921	252,434	262,025	2,400,437
1882.....	161,433	158,154	152,651	145,272	137,645	132,572	136,398	.....	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS:													
1880.....	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,996	2,049,448
1881.....	178,143	190,866	207,710	183,595	104,430	154,549	150,430	168,317	179,979	172,121	152,059	173,127	2,075,256
1882.....	156,994	159,961	161,005	154,155	137,645	119,074	.....	.....	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND:													
1880.....	164,232	149,907	183,845	179,689	183,701	219,891	205,056	249,885	235,642	215,491	210,856	198,108	2,396,302
1881.....	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882.....	213,840	217,261	265,222	263,544	283,244	290,060	.....	.....	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN:													
1879.....	1,147,173	1,207,391	1,356,780	1,372,755	1,350,574	1,230,419	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880.....	1,252,218	1,044,958	1,643,151	1,592,544	1,661,812	1,580,976	1,606,874	1,786,417	1,786,417	1,899,910	1,799,338	1,726,788	19,149,361
1881.....	1,443,437	1,425,765	1,847,261	1,709,057	1,776,891	1,794,982	1,787,081	1,772,895	1,734,200	.....	.....	.....	.....
NORTHERN CENTRAL:													
1880.....	334,494	330,860	415,325	386,130	329,788	419,193	450,298	453,923	464,093	512,918	459,054	494,310	5,050,387
1881.....	380,157	382,657	452,906	487,273	405,588	487,287	440,811	498,008	429,565	449,664	487,160	476,622	5,443,697
1882.....	407,368	413,551	430,194	435,129	482,607	482,752	.....	.....	.....	.....	.....	.....	.....
NORTHERN PACIFIC:													
1880.....	81,390	77,259	119,357	185,700	217,613	253,105	241,277	223,500	330,300	358,456	300,822	220,993	2,629,710
1881.....	116,508	78,803	162,984	216,210	312,705	412,024	404,180	411,624	490,096	565,485	428,903	434,331	4,044,576
1882.....	239,800	269,000	384,000	438,000	568,332	631,342	.....	.....	.....	.....	.....	.....	.....
PHILADELPHIA AND ERIE:													
1880.....	224,307	245,372	327,678	334,947	311,470	331,024	308,699	347,532	322,737	367,082	324,966	281,919	3,727,733
1881.....	224,303	225,501	285,573	393,323	343,792	350,585	291,669	303,849	276,522	292,392	284,078	282,772	3,454,309
1882.....	252,727	246,246	265,311	277,851	341,415	341,614	.....	.....	.....	.....	.....	.....	.....
ST. LOUIS AND SAN FRANCISCO:													
1880.....	198,091	195,948	193,146	176,164	167,664	173,607	213,297	259,995	280,873				

On Holes.



In this world there is a great variety of holes, some of use and some worse than useless. There is the arm-hole to a coat, there is the rat-hole, key-hole, and a lot of others, including the knot-hole, which is not a hole till the knot is out. We heard of a man who bought a cake of beeswax weighing 5 pounds. After getting it home and breaking it, he found a large hole in the middle; he immediately took it to the merchant, and accused him of cheating. The merchant told him it was a mistake, but if he would weigh the hole, he would deduct, and return him his money for the weight of the hole. The merchant being perfectly honest, made it right. But who would think of a patent on a hole? And yet this has been done lately. This is for an escape of passengers, in case of a railroad accident. But the holes are not seen till the accident takes place, when trap-doors are thrown open in the floor of the cars, in the aisle. How many during the past few years would have been glad to have discovered such a hole, and for the want of it have lost their lives, in the burning or upsetting of the car, who would have been saved by such a simple contrivance. Cars can be altered with very little expense, and built with little or no extra cost. More particulars can be had of J. McDougal, room 18, 43 Exchange place.

"THE Blaine and Davis road" is the local name of the new West Virginia Railroad controlled by Senator Davis and ex-Secretary Blaine.

THE longest three-quarter inch rod ever made was recently rolled at the Albany Iron Works in Troy, N. Y. It is 236 feet in length. The manufacture was experimental, to determine how long a rod could be rolled. The rolls moved with lightning speed to carry the rod through before it cooled.

ALTHOUGH an immense sum has been spent by Pittsburgh, Pa., for city water-works, and there is a debt thereon of five millions, the engines are practically useless from repeated breaks, and the city has to rely on pumps belonging to large iron manufactories, idle from the strike.

A TRAIN of twenty-five cars of tea and silk, which left San Francisco July 12, made the run to Kansas City in six days and six hours, and from Deming to Kansas City, a distance of 1,150 miles, in sixty-six hours. A second train of twenty-nine cars left San Francisco twenty-four hours later, and made the same time to Kansas City. This time is believed to be unprecedented.

McCANN'S EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability
IT HAS NO EQUAL

MARION W. McCANN,
Patentee and Inventor,
DUBLIN

BUSINESS CARDS.

- A** LLEN PAPER CAR WHEEL CO., 240 BROADWAY, New York.
- B**ROWN BROTHERS & CO., BANKERS AND BROKERS, 59 Wall Street, N. Y.
- B**ABCOCK & WILCOX CO., WATER TUBE STEAM Boilers, 30 Cortlandt Street, N. Y.
- B**BROWN MANUFACTURING CO., ABSORBENT Wiper Cloths, Providence, R. I.
- B**EARDSLEY, D. N. & CO., MANUFACTURERS OF Superior Oak and Chestnut Lumber, and Railroad Ties, 9 Murray Street, N. Y.
- C**HESTER STEEL CASTING CO., MANUFACTURE Steel Castings, Cross-heads, Rocker-arms, Piston-heads, etc., for Locomotives, 407 Library St., Phila., Pa.
- D**AVIDS, JOHN B. & CO., WRITING INKS, 184 William Street, N. Y.
- D**AVIS, JOHN H. & CO., BANKERS AND BROKERS, 17 Wall Street, N. Y.
- D**ODGE & SINCLAIR, MANUFACTURERS OF RUBBER and Leather Belting, 21 Park Row, N. Y.
- E**VANS, GEO. A. IRON AND STEEL RAILS, 74 WALL Street, N. Y.
- E**AGLE TUBE CO., BOILER TUBES, 614 to 626 WEST Twenty-fourth Street, N. Y.
- E**AMES VACUUM BRAKE CO., RAILWAY TRAIN Brakes, 15 Gold Street, N. Y.
- F**AIRBANKS & CO., STANDARD SCALES, RAILROAD and Warehouse Trucks, and Copying-presses, 311 Broadway N. Y.
- G**ORDON & DUGGAN, RAILWAY SWITCHES, 28 State Street, Boston, Mass.
- G**UEST, WM. A. & CO., IRON AND STEEL RAILS, 41 and 43 Pine Street, N. Y.
- G**EORGE, EVAN P. JR., COUNSELLOR AT LAW AND Solicitor of Patents, 4 and 6 Warren Street, N. Y.
- H**ARLAN & HOLLINGSWORTH CO., MANUFACTURE Passenger Cars, Wilmington, Del.
- H**AYWARD, S. F. GENERAL AGENT BABCOCK Fire Extinguisher, 407 Broadway, N. Y.
- I**VISION, BLAKEMAN, TAYLOR & CO., STEEL PENS 753 and 755 Broadway N. Y.
- J**OHN STEPHENSON CO., TRAM-CAR BUILDERS, New York.
- K**AOLATYPE ENGRAVING CO., 104 FULTON ST., New York.
- K**NOX & SHAIN, MANUFACTURERS OF ENGINEERING and Telegraphic Instruments, 716 Chestnut Street, Philadelphia, Pa.
- M**OLLER & SCHUMANN, MANUFACTURERS OF Coach and Car Varnishes, Brooklyn, N. Y.
- N**ATIONAL TUBE WORKS CO., MANUFACTURE Wrought Iron Pipes and Tubes, 104 and 106 John Street, N. Y.
- N**ATIONAL RAILWAY PATENT WASTE COMPANY 240 Broadway, N. Y.
- P**ARDEE CAR WORKS, PARDEE, SNYDER & CO., (Limited) Watertown, Pa.
- P**ERKINS & CHOATE, AGENTS FOR STEEL OR IRON Rails, 23 Nassau Street, N. Y.
- R**IEHLE BROS., STANDARD SCALES AND TESTING Machines, 115 Liberty Street, N. Y.

NEW YORK, Aug. 2, 1882.
THE FORTIETH SEMI-ANNUAL CASH DIVIDEND of the ILLINOIS CENTRAL RAILROAD COMPANY, being three and a-half (3½) per cent on its capital stock, will be paid by the undersigned September 1, 1882, to shareholders as registered at the close of business on the 12th of August, after which and until the 5th day of September the transfer-books will be closed.
L. V. F. RANDOLPH, Treasurer.

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY CO.
TREASURER'S OFFICE, GRAND CENTRAL DEPOT, }
NEW YORK, June 27, 1882. }

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND OF TWO PER CENT upon its capital stock, payable on Tuesday, the first day of August next, at this office.

The transfer-books will be closed at 3 o'clock P. M. on MONDAY the THIRD DAY OF JULY next, and will be re-opened on the morning of Friday, the fourth day of August next.

E. D. WORCESTER, Treasurer.

Rendle's Patent Systems of Glazing Without Putty.

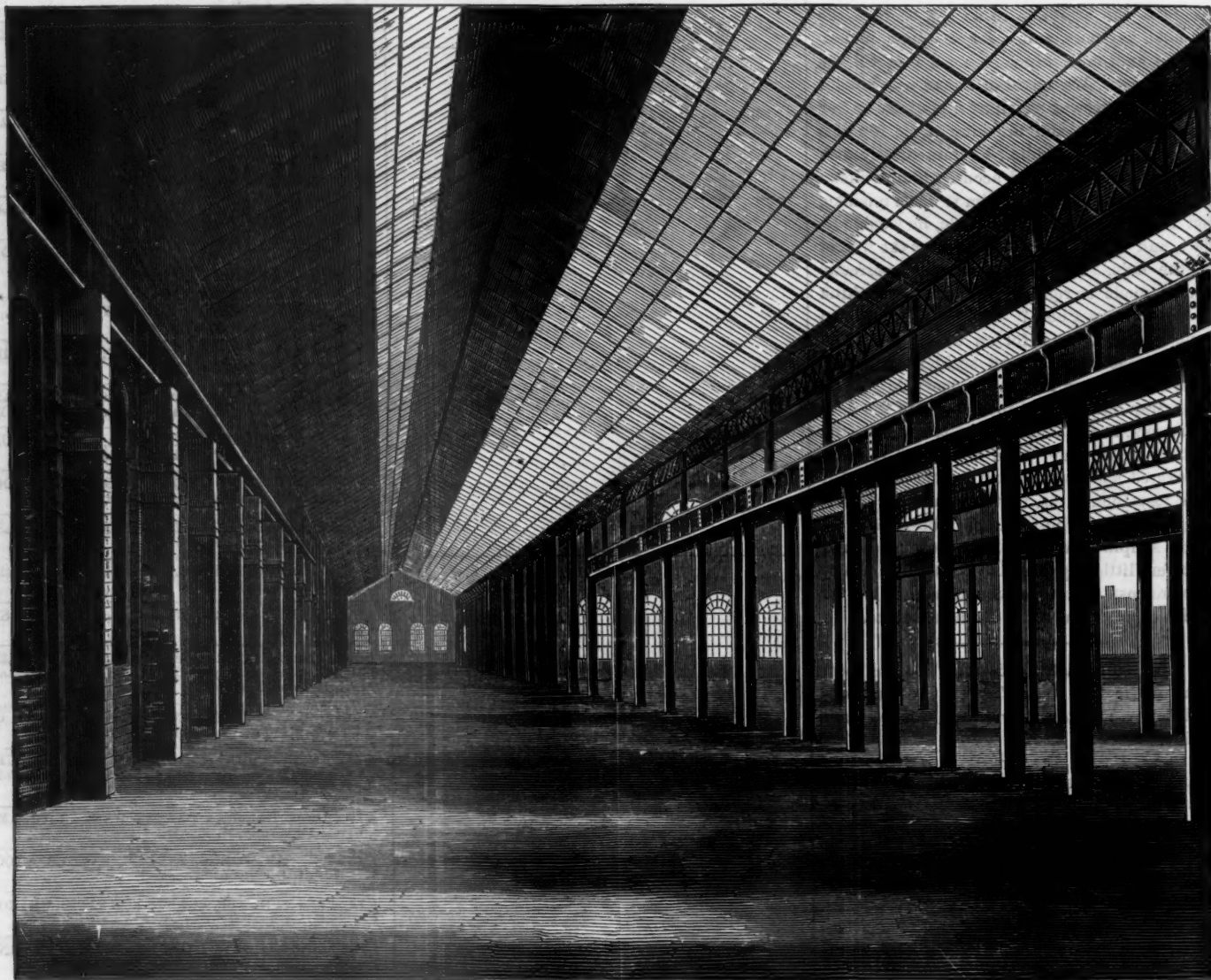
Some of the largest railway stations in the world have been glazed on Rendle's system; for instance, the Carlisle Citadel station, 322,000 square feet of glass; Gordon street station, Glasgow, 130,000 feet; Bridge street station, Glasgow, 100,000 feet; Dundee station, 100,000 feet; etc., etc.

These systems have now been in practical use in the United States for more than a year, and have scored a decided success. Several railroad companies have adopted the systems

factory; Bamabo Manufacturing Company, Fall River, Mass., continuous sky-light, 20x220, for their new weaving factory; Hamilton Web Company, Wickford, R. I., continuous sky-light, 12x150; Messrs. Poole & Hunt, of Baltimore, Md., the well-known manufacturers of mill gearing, continuous sky-light, using nearly 5,000 square feet of glass; Messrs. Wm. Skinner & Sons' Silk Mills, Holyoke, Mass., sky-light, 6x45; Messrs. S. A. Greene & Sons, Clyde Bleachery and Print Works, Riverpoint, R. I., sky-lights, 6x32; Straight Line Engine Company, Syracuse, N. Y.; the Washburn & Moen Manufacturing Company, Worcester, Mass., six

In England more than five hundred conservatories, etc. have been glazed on Rendle's systems, and experience by work done in this country for more than a year shows that they are as well adapted for this climate as for that of England.

A large conservatory, 150 feet long, is now in process of erection for the Columbus (Ohio) Asylum for the Insane, under this system, and conservatories, etc. have already been erected in different parts of the country, among which is a conservatory, 20x50, for W. E. Story, Esq., proprietor of the *Times* newspaper, Chicago, which has given entire satisfaction; conserva-



WHITWORTH GUN FACTORY, OPENSHAW, NEAR MANCHESTER.—GLAZED ON RENDLE'S PATENT "ACME" SYSTEM.

for depot skylights, etc., among which are the New York Central and Hudson River Railroad (which was the first to introduce the systems in this country, for its new Buffalo depot, viz: a skylight 30x460 in.), New York, Pennsylvania and Ohio Railroad, Flint and Pere Marquette Railroad, etc.

A large number of manufacturing concerns have adopted the systems for top-lighting as follows: Yale Lock Manufacturing Company, Stamford, Conn., 52 sky-lights, 3x4 in., Renfrew Manufacturing Company, Adams, Mass., 132 sky-lights, 4 and 6x12, for their new weaving

large sky-lights; the Holly Manufacturing Company, Lockport, N. Y., sky-light, 12x100; Messrs. Wallcott & Campbell, New York Mills, New York, seven sky-lights; N. W. Gardner, Esq., architect, Buffalo, nine sky-lights; Miami Soap and Oil Works, Cincinnati, O.; Messrs. Weaver & Seligman, East Saginaw, Mich., Lawn Tennis Association, New York, twelve sky-lights, 9x10; etc., etc.

The systems are especially adapted for roofs of conservatories, plant-houses, etc., and it is expected that they will very soon supersede the old unsatisfactory method of putty glazing.

tory, 20x100, George Westinghouse, Jr., Esq., Pittsburgh, Pa.; Mrs. Robert Pitcairn, Pittsburgh, Pa., 20x55; Napoleon Hill, Esq., Memphis, Tenn.; Messrs. Muscovitz Bros., corner Fifth avenue and Thirty-first street, New York, etc., etc.

The systems have taken first premium at the Cincinnati Exposition; Boston, Mass., Charitable Mechanic Association, silver medal; Pittsburgh, bronze medal. In addition to these, three medals have been awarded in England and one in Paris.

Illustrated catalogues and further particulars can be had by addressing the patentee, Arthur E. Rendle, 7 Warren street, New York.

KNOX & SHAIN,

Manufacturers of Engineering and Telegraphic Instruments. No. 716 Chestnut Street, Philadelphia. Two Medals awarded by the Franklin Institute, and one by the Centennial.

RAILROAD IRON.

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HOOSAC TUNNEL ROUTE
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Connecting at Syracuse, N. Y., at 7.15 P. M., with through sleeping cars for Cincinnati, Cleveland, Toledo, **DETROIT AND CHICAGO.**

3.00 P. M. CINCINNATI EXPRESS.

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs *via* Erie Railway and N. Y., P. & O. R. R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

3.00 P. M. ST. LOUIS EXPRESS.

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A. M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville, Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

6.00 P. M. PACIFIC EXPRESS.

The only line running a through sleeping car *via* Buffalo and Detroit without change, arriving at Chicago at 8.00 A. M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous **HOOSAC TUNNEL**, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

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JOHN ADAMS, General Superintendent. F. O. HEALD, Acting en'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

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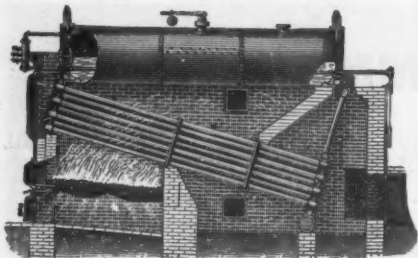
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Office: 28 South 3d Street.

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**TRAM-CAR BUILDERS,
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Superior Elegance, Lightness and Durability. The result of 50 years' experience.

Adapted to all countries and climates. Combining all valuable improvements. Shipped to Foreign Ports with greatest care, and at most favorable rates.

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RAILROAD, MINING, AND
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Manufacturers of all Weights of Standard and Narrow Gauge Rails by the most approved process. Also Rail Fastenings, Steel and Bloom Boiler Plate, and Tank, Sheet, and Bar Iron.

FROM 1-4 TO 10,000 lbs. WEIGHT.

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15,000 Crank Shafts and 10,000 Gear Wheels of this steel now running prove its superiority over other Steel Castings.
CRANK-SHAFTS, CROSS-HEADS and GEARING, specialties.
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TO THE TRAVELING PUBLIC.

During the Centennial season—six months closing September 10, 1876—the Erie Railway carried almost THREE MILLION passengers, without a single accident to life or limb, or the loss of a piece of baggage.

And for a whole year the official records of the United States Post Office Department show the arrivals of Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

Facts well worthy the consideration of travelers.

E. S. BOWEN, General Superintendent.

JNO. N. ABBOTT, Gen. Passenger Agent.



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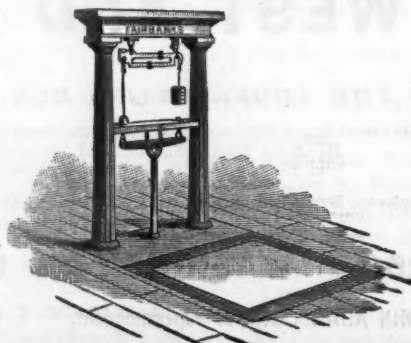
800 MODIFICATIONS.

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Manufacturers of Mail, Baggage, Box, Gondola, Flat, Gravel, Ore, Coal, Mine, and Hand Cars; Kelley's Patent Turn-Tables, and Centers for Wooden Turn-Tables; Car Castings, Railroad Forgings, Rolling-Mill Castings, Bridge Bolts, Castings.

We have, in connection with our Car Works, a Foundry and Machine-Shop, and are prepared to do a general Machine Business.

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PRICES LOWER THAN OTHER MANUFACTURERS.

NO PAYMENT REQUIRED UNTIL
TUBES ARE TESTED AND
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N. B.—Send for Stock List

The Coal Trade.

The leading coal-carrying companies make the following reports of their tonnage for the week ending July 22, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	195,355	4,850,716	4,620,121
Schuylkill Canal	11,313	184,858	254,716
Lehigh Valley	134,391	3,774,458	3,438,901
Delaware, Lackawanna and Western	111,243	2,311,467	2,214,479
Shamokin	29,609	572,165	569,692
Central R. R. of New Jersey ..	110,850	2,271,157	2,250,452
United R. R. of New Jersey ..	37,772	912,403	836,170
Pennsylvania Coal	34,213	684,458	679,219
Delaware and Hudson Canal ..	85,634	1,769,844	1,860,747
Huntingdon and Broad Top Mountain	6,176	234,927	274,324
Penn. and New York	26,392	909,724	891,578
Clearfield, Pa.	47,688	1,568,260	1,327,311

The total tonnage of anthracite coal from all the regions for the week ending July 22, as reported by the several carrying companies, amounted to 684,030 tons, against 646,007 tons in the corresponding week last year, an increase of 38,023 tons. The total amount of anthracite mined for the year is 14,654,903 tons, against 14,194,936 tons for the same period last year, an increase of 459,967 tons. The quantity of bituminous coal sent to market for the week amounted to 59,200 tons, against 101,897 tons in the corresponding week last year, a decrease of 42,697 tons. The total amount of bituminous mined for the year is 2,303,992 tons, against 2,686,976 tons for the corresponding period last year, a decrease of 382,984 tons. The total tonnage of all kinds of coal for the week is 743,230 tons, against 747,904 tons in corresponding week last year, a decrease of 4,674 tons, and the total tonnage for the coal year is 16,958,895 tons, against 16,881,912 tons to same date last year, an increase of 76,983 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending July 22 was 222,763 tons, of which 175,907 tons were coal and 46,856 tons coke. The total tonnage for the year thus far has been 6,095,933 tons, of which 4,450,735 tons were coal and 1,645,198 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended July 22 were 9,531 tons, and for the year to that date 556,956 tons, a decrease of 530,386 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—For the week, 7,662 tons; year, 462,463 tons; decrease as compared with 1881, 272,700 tons. Chesapeake and Ohio Canal—Week, 1,869 tons; year, 15,819 tons; decrease as compared with 1881, 201,443 tons. Pennsylvania Railroad—Week, none; year, 74,842 tons; decrease as compared with 1881, 59,750 tons. The Reading Railroad shipment for last week, ending July 29, was about 195,000 tons, of which 71,500 tons were sent to and 64,000 tons shipped from Port Richmond, and 8,500 tons sent to and 10,600 tons shipped from Elizabethport.—*Philadelphia Ledger*, July 31.

Progress in Telephony.

SOME important telephone results have been lately obtained by M. van Rysselberghe, the Belgian meteorologist, whose very ingenious meteorograph was shown at the Paris Exhibition last year. He has succeeded in eliminating from telephonic communication through a wire the inductive action of a neighboring telegraph wire (which gives a crackling kind of noise in the telephone). Moreover, he can employ the same wire at the same time for both telephonic and telegraphic work. Thus, in a recent experiment, a message was sent from Brussels by the Morse telegraph to the directing engineer of telegraphs in Paris; and an oral message sent by telephone was distinctly heard while the Morse receiver was in action. Paris is 344 kilometres wire length from Brussels. Among other recent telephonic connections we note Venice and Milan (284 kilometres), Berlin and Hamburg (288 kilometres), Paris and Dijon (314 kilometres), Paris and Nancy (353 kilo-

metres). At the forthcoming exhibition in Munich telephony is to be tried between that town and Dresden, a distance of 550 kilometres (or about 343 miles). American accounts report experiments in progress as to what may and what may not be done in telephony on underground wires, a cable for the purpose having been laid by the American Bell Telephone Company along the Boston and Providence Railroad. There are 21 rubber-covered copper wires within a lead pipe, 10 of these being also covered with tinfoil to carry off extraneous induction currents, while 10 are twisted together; the twenty-first wire is covered with cotton and paraffined. A French naval committee has lately reported on the use of the telephone in giving operations. The transmitter approved as best is a small, flat, circular telephone, having interiorly two spiral magnets superposed. The Gaiffe telephone as receiver gives good effects. Microphones (both the ordinary microphone and the Ader) are pronounced less advantageous. A comparison was also made with the ordinary speaking-trumpet, which proves inferior to the telephone, especially as the depth increases (owing to the effects of pressure on the membrane in the case of the trumpet). Various modifications of the telephone appear from time to time. One of these is Botcher's telephone, the peculiarity of which is that the magnet, instead of being fixed in the case, is suspended by steel wires, so that it can, to some extent, participate in the vibrations of the membrane, but in opposite direction. The magnetic variations are thus increased, and stronger induction currents introduced in the coil.—*London Times*.

The City of Cairo.

CAIRO is the capital of Egypt, the most populous city in Africa, and contains 380,000 people. Three-fourths of these are Mahomedans, 60,000 Copts, and the rest chiefly native Jews, and Greeks, Armenians and Europeans. The city lies mostly on the level plain of the Nile valley, and occupies a site about seven miles in circumference. From without its aspect is most enchanting, but within it is far less attractive, the houses being mostly built of mud or sun-baked brick, one-story high. Those of the rich, however, are from two to three stories high, and built of brick, wood or soft stone. The streets are dusty and neglected, and very little rain falls. A great rain is deemed a calamity, as it moistens the garbage, which quickly sends forth pestiferous exhalation. The water, which during the overflow of the Nile is conveyed into the city by a canal, becomes stagnant in May and June, and is another prolific source of disease. The different races that inhabit Cairo live in distinct quarters, of which there are many, as the Jew's quarter, the Frank quarter, the Coptic quarter, etc. The streets leading to each quarter are closed by gates at night. The city is surrounded by walls. It is the central station of the overland route to India, and its commerce is considerable. One of the most lucrative trades is that in precious stones and jewelry. It is connected by rail with Alexandria and Suez, and caravans annually arrive from Darfoor, Sennaar and Moorzook. Each year an im-

mense caravan assembles at Cairo, to make the pilgrimage to Mecca, and this is the source of a great traffic.

Imports of Dry Goods at New York.

THE Imports of Foreign Dry Goods at New York for the month of July, were:—

ENTERED FOR CONSUMPTION.			
	1880.	1881.	1882.
Manufs. of wool....	\$2,118,542	\$1,798,987	\$2,388,209
Manufs. of cotton....	1,710,612	1,594,666	1,751,383
Manufs. of silk....	2,570,055	2,472,397	3,034,701
Manufs. of flax....	842,286	836,749	1,023,138
Miscell. dry goods....	489,881	466,620	610,863
Total ent. for consumption.....	\$7,713,376	\$7,169,419	\$8,748,354
WITHDRAWN FROM WAREHOUSE.			
	1880.	1881.	1882.
Manufs. of wool....	\$756,622	\$619,842	\$648,591
Manufs. of cotton....	432,239	429,538	248,693
Manufs. of silk....	379,797	267,122	444,534
Manufs. of flax....	312,989	300,593	293,550
Miscell. dry goods....	57,121	79,560	75,583

Total withdrawn from warehouse.....	\$1,938,678	\$1,506,655	\$1,710,951
Add ent. for con....	7,713,376	7,169,419	8,748,354

Total thrown on the market.....	\$9,652,054	\$8,676,074	\$10,459,305
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ENTERED FOR WAREHOUSING.			
	1880.	1881.	1882.
Manufs. of wool....	\$1,491,640	\$598,662	\$1,018,946
Manufs. of cotton....	568,737	277,273	425,677
Manufs. of silk....	668,576	429,620	558,259
Manufs. of flax....	517,438	347,848	426,881
Mis. dry goods....	110,394	149,360	194,923

Total ent. for warehouse	\$3,356,785	\$1,802,763	\$2,624,686
Add entered for consumption	7,713,376	7,169,419	8,748,354

Total ent. at port....	\$11,070,161	\$8,972,182	\$11,373,040
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The Imports of Foreign Dry Goods at New York for seven months from January 1, were:—

ENTERED FOR CONSUMPTION.			
	1880.	1881.	1882.
Manufs. of wool....	\$11,645,781	\$9,227,753	\$12,675,012
Manufs. of cotton....	14,556,332	13,120,313	15,332,442
Manufs. of silk....	17,538,783	15,255,565	21,125,096
Manufs. of flax....	9,004,508	6,915,630	8,486,455
Mis. dry goods....	5,098,071	4,605,796	5,401,341
Total entered for consumption ...	\$57,843,475	\$49,125,057	\$63,020,346
WITHDRAWN FROM WAREHOUSE.			
	1880.	1881.	1882.
Manufs. of wool....	\$3,512,310	\$4,511,747	\$3,836,777
Manufs. of cotton....	2,215,049	3,025,859	3,305,227
Manufs. of silk....	2,892,340	3,042,934	3,258,033
Manufs. of flax....	2,414,460	3,215,526	3,276,192
Mis. dry goods....	1,083,954	1,437,448	1,443,935

Total withdrawn from warehouse.	\$12,118,113	\$15,933,474	\$13,220,164
Add entered for consumption ...	57,843,475	49,125,057	63,020,346

Total thrown on the market.....	\$69,961,588	\$64,358,531	\$76,240,510
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ENTERED FOR WAREHOUSING.			
	1880.	1881.	1882.
Manufs. of wool....	\$5,931,616	\$3,790,565	\$4,686,459
Manufs. of cotton....	2,984,533	2,577,250	2,637,060
Manufs. of silk....	3,547,208	2,826,692	3,524,177
Manufs. of flax....	3,927,839	2,500,310	2,451,875
Mis. dry goods....	1,275,871	1,569,562	1,456,052

Total entered for warehouse	\$17,577,067	\$13,264,379	\$14,755,623
Add entered for consumption ...	57,843,475	49,125,057	63,020,346

Total ent. at port....	\$75,420,542	\$62,389,436	\$77,775,969
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These figures represent only the foreign gold cost, freight and duty not included.

THE Railroad Commissioners of Illinois say that they have agreed to revise the present railroad classifications sufficiently to meet the wishes of the leading railroad companies, and no further controversy is likely to occur between the companies and the commissioners. The revised classifications will simplify rates and enable the roads to make a better show of earnings.

FOR SALE.

Locomotives—Five Second-hand Narrow Gauge Engines in good order.
 One Second-hand "Tank" Narrow Gauge Engine, 10 tons.
 Several Second-hand Standard Gauge Locomotives in good order, immediate delivery.
 One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.
 Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. August and September delivery.
 One new 3ft. Gauge Saddle Tank Engine, delivery this month.
 Cars—Passenger and Freight Cars of all descriptions for early delivery.
 Three Second-hand Passenger Coaches in good order.
 Rails—16lb., 30lb. and 56lb. Rails in store.
 Car Wheels and Axles.
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Gray's Universal Automatic Car Coupler.

Invented by RICHARD E. GRAY, of Williamsport, Pa.

THERE is perhaps no article or device needed so much among the railroads in general as a car-coupler that will couple cars of unequal heights together without any inconvenience to the operatives, but also save the lives and limbs of thousands of brakemen. Public sentiment demands that there shall be a general revolution in that branch of railroading. Among the hundreds of railroads in our country there are men killed and other maimed for life every day in the year, from coupling cars by the present imperfect system. In most cases of death, or being crippled while coupling cars, it may be said to be a quadruple loss. First, the victim loses his own life or limb, as the case may be; second, his family loses his support; third, the community loses a citizen; fourth, the railroad companies lose a vast amount of money paid out for damages sustained by employees who are injured while in their service.

Out of over 63,000 patents that have been issued for car-couplers alone, not one of them has met the requirements of the railroad companies, as a freight-car coupler.

The principle of the pivot-hook system has come the nearest to it of any other, and is used successfully on passenger cars. But heretofore the mechanical construction of a coupler on that principal, has rendered it entirely inefficient for freight cars.

GRAY'S UNIVERSAL AUTOMATIC CAR-COUPLER, entirely does away with all links, springs, spring-locks, spring-levers, sliding-blocks, and similar objectionable devices heretofore employed for automatic couplers. The whole construction is plain, simple and durable, and there is not a weak point in it. While coupling cars with this there is no reason why a brakeman should ever lose his life or get crippled in any way; because under no circumstances does he have to go between them to either couple or uncouple. Cars of unequal heights are coupled without any changes or inconvenience as well as though they were uniform.

This invention relates to car-couplings of the class known as "twin" couplings, and more especially to that type in which the draw-bars or draw-heads, are provided with pivoted-hooks to constitute the coupling devices. The object of the invention is to bring into general use, more especially on freight cars, a coupling that is simple in construction, durable, and most efficient in coupling cars of unequal heights, and also to prevent accidents among the operatives.

The device is a *pivoted-hook automatic car-coupler* attached to the ends of the cars in the usual manner. The draw-head and pivoted-hook on each end of the car are precisely the same in construction. The draw-heads are similar to the ones used on the Pennsylvania Railroad Company's freight cars, with the exception of the slotted cap on the end for the link to pass through. In place of said cap, the ends of the draw-head jaws are rounded to help form a knuckle joint. There is a hook fitted into the recess between the said jaws, pivoted at the same point where the coupling

pin at present in use passes vertically down through the draw-head. The pivot-pin is also the pin that draws the load. The said pin always remains intact. The said pivot, or draw-pin, is more substantial than the one now used.

In the present system of coupling there is a space of four inches between the jaws of the draw-head, where the coupling pin passes through, which gives the links, when coupled, a purchase, or leverage, of about two inches either way, which results very frequently in the bending or breaking of said pin.

In the Automatic Coupler there is no leverage at all when the draft comes on the pin, because the pivoted-hook fills the recess between the jaws of said draw-head; thereby rendering it impossible for the pivot, or draw pin, to either bend or break. The pivot-hook has a shank or tail end to it which reaches back from the pivot-pin about six inches. When the pivot-hook is in a coupled position the shank is in line or parallel with the draw-head, and between the jaws of said draw-head.

At the rear end of the shank, and near the inner edge of the shank and draw-head, there is a vertical opening, or hole, to admit a coupling-pin to rigidly hold the pivoted-hook to the draw-head in a coupled position. The said coupling-pin has a solid collar around the center of it, which rests upon the draw-head when in a coupled position. The upper end of said pin is fitted to move endwise through a vertical opening in a supporting arm, or yoke, that is firmly bolted to the top jaw of the draw-head, so that the said coupling-pin is always guided and supported in a vertical position, and prevented from being detached from the coupler.

In order to prevent the locking of the coupling-hook, by accidental or unauthorized closing to its coupling position, while insuring its locking when the two cars come together to be coupled, there is a pivoted latch fitted on the top side of the shank of the pivoted-hook which has a vertical opening corresponding with the the openings, or holes, in the draw-head and pivoted-hook shank. This latch, or plate is drawn out of its chamber, or recess, by a lug fastened on the top surface of the hook-shank, as the pivoted-hook is racked, or swung around when the cars are being uncoupled, thereby bringing the solid surface of the latch over the vertical opening of the pivoted-hook shank; therefore the coupling-pin is upheld in its unlocking position, and prevents the locking of the coupling-hook by accidental or unauthorized movement of said hook. In order to readily raise the coupling-pin from the side of the cars, so as to avoid the necessity of going between them or climbing on the platform to uncouple, there is a lever employed to raise the said coupling-pin, which is very simply and substantially fastened to the draw-head.

Now suppose that two cars are coupled, and the trainmen are desirous of uncoupling them. It matters not which side of the car the brakeman is on; he places his hand upon the end of the lever and presses down upon it and thereby raises the coupling-pin. The pivoted-hook readily swings, or rocks around as the cars separate.

The pivoted-latch is now drawn out so as to uphold the coupling-pin in an unlocked position, even if the pivoted-hook were moved back to its locking position; because the lug on said shank has no further control over it, on account of a concentric slot in said latch, which said lug moves back in, thereby leaving it out of its recess to uphold the coupling-pin until the cars come together to effect the coupling.

When the trainmen are desirous that the cars should not couple when they come together while they are shifting cars or making up a train, there is a hook provided and fastened to the end of the car to place the lever in, in order to uphold the coupling-pin and force the pivoted-latch automatically into the recess, thereby bringing the vertical opening in it to correspond with the vertical opening in the hook-shank. In this case the coupling-pin would drop to its normal position automatically, and effect a coupling when not desired, if the pin were not upheld by said lever.

When the brakeman is desirous of coupling said cars, he detaches said lever from the hook by which it has been held down; raises it up and lays it in another hook higher up on the end of the car, which is provided as a safeguard when it is desired that the couplers shall remain locked. The coupling-pin is now upheld by the pivoted-latch, and the pivot-hook is swung outward, thereby moving the shank out of the recess and across the path of the coupler of the approaching car, which is held rigid by the coupling-pin, which rests in its normal position. The nose of the coupler on the approaching car strikes the shank and pivot-latch of the unlocked coupler, and forces them into the recess, causing the vertical openings to coincide with those in the draw-head, at which time the coupling-pin drops automatically into the opening, and the coupling is effected. It matter not whether the cars are uniform, or vary two, four, six or eight inches in height; the coupling is effected with the same ease as though all were uniform.

Suppose that one railroad has adopted Gray's Universal Car-Coupler, and another road is still using the link system of coupling, and cars are exchanged; a provision is made to obviate any difficulty that might arise in effecting a coupling. In the heads of the pivoted-hooks are recesses to receive the coupling-links in common use for coupling cars, a pin passing vertically downward across those recesses to secure the link to the hook.

In a word, Gray's Universal Car-Coupler, is plain, simple, durable, not liable to get out of repair, works speedily and easily. If a car should be thrown from the track, turned over or precipitated down an embankment, it will disengage itself from the rest of the train and not drag the other cars along with it.

WHEN Sir Robert Peel introduced the bill for the increased grant to Maynooth, he rested his arguments less upon any broad scheme of policy which might have compromised him directly with powerful parties than upon the fact that the principle had been sanctioned, though obscurely, by Parliamentary authority. This gave occasion to Mr. Disraeli to make a hit at the Premier, which was at once humorous and true. He said that with him "great measures were always rested on small precedents; that he always traced the steam-engine back to the tea-kettle; that, in fact, all his precedents were tea-kettle precedents."